

Tronox LLC

Final Completion Report – Reach 5B

Kress Creek/West Branch DuPage River Site and
the River Portion of the Sewage Treatment Plant
Site

Issued: July 2008

Revised: November 2008

Certification

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Mark S. Krippel
Tronox Program Manager



Michael F. Savage
ARCADIS Project Manager



Mark O. Gravelding, P.E.
ARCADIS Project Officer

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Reach 5B**

Kress Creek/West Branch
DuPage River Site and the River
Portion of the Sewage Treatment
Plant Site

Prepared for:
Tronox LLC

Prepared by:
ARCADIS
6723 Towpath Road
P.O. Box 66
Syracuse
New York 13214-0066
Tel 315.446.9120
Fax 315.449.0017

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Acronyms and Abbreviations

ACAR	Audit Corrective Action Report
BBL	Blasland, Bouck & Lee, Inc.
BOL	Bill of Lading
C	Coefficient of Conservatism
CAR	Corrective Action Report
CBB West	Christopher B. Burke Engineering West, Ltd.
CD	Federal Consent Decree between Kerr-McGee and the United States of America, State of Illinois
CFR	Code of Federal Regulations
CMRDP	Conceptual Mitigation and Restoration Design Plan
CQAP	Construction Quality Assurance Plan
FD/RA	Final Design/Remedial Action
FQI	Floristic Quality Index
GPS	Global Positioning System
HASP	Health and Safety Plan
IEMA/DNS	Illinois Emergency Management Agency/Division of Nuclear Safety
ICN	Interim Change Notice
NCR	Non-Conformity Report
QAPP	Quality Assurance Project Plan
QA	quality assurance
QA/QC	Quality Assurance/Quality Control
RC _s	relative coverage
REF	Rare Earths Facility
RF _s	relative frequency
RIV _n	relative importance value
RPM/OSC	remedial project manager/on-scene coordinator
SOW	Statement of Work
STP	Sewage Treatment Plant
TMSP	Targeted Material Stabilization Plan
Tronox	Tronox LLC, formerly known and referred to as Kerr-McGee Chemical LLC [Kerr-McGee]
USEPA	United States Environmental Protection Agency

1. Introduction

This Final Completion Report has been prepared by ARCADIS (formerly known as Blasland, Bouck & Lee, Inc.), on behalf of Tronox LLC (Tronox; formerly known as Kerr-McGee Chemical LLC [Kerr-McGee]), to summarize the remedial action, restoration, and mitigation and restoration monitoring activities performed in Reach 5B (which includes excavation areas identified as R5B-1 through R5B-12) at the Kress Creek/West Branch DuPage River Site (Kress Creek Site) and the River Portion of the Sewage Treatment Plant Site (STP Site), collectively referred to as the Sites, both located in DuPage County, Illinois. A final summary of the results from the restoration/mitigation monitoring performed for Reach 5B in 2008 will be submitted under separate cover (as described in Section 8.3).

1.1 Background

Historical operations at the West Chicago Rare Earths Facility (REF), where thorium and other elements were extracted from monazite sands, bastnasite, and other ores between 1932 and 1973, and the STP, which received debris and waste from the REF, resulted in the distribution of low level radioactive thorium residuals in portions of Kress Creek, the West Branch DuPage River, and their associated floodplains.

Extensive site characterization activities were performed to delineate areas at the Sites with radioactive levels of thorium residuals (BBL, 2004). A site remedy (remedial action) was developed based on the site investigation findings and the baseline human health and ecological risk assessments performed by the United States Environmental Protection Agency (USEPA). The remedial action was designed to be consistent with the requirements set forth in 40 Code of Federal Regulations (CFR) Part 192 in implementing the Uranium Mill Tailings Radiation Control Act and the Illinois Source Material Milling Facility Licensing Regulations under Title 32 of the Illinois Administrative Code Part 332.

The selected remedial activities to be implemented at the Sites is based upon an extraordinarily extensive level of characterization activities and lengthy and detailed dialogue among Tronox, USEPA, and representatives of the Local Communities, including the City of West Chicago, West Chicago Park District, DuPage County, the DuPage County Forest Preserve District, and the City of Warrenville. This characterization effort defined the limits of excavation of targeted materials to assure protection of human health and the environment.

Specifically, the remedial activities in Reach 5B presented in this report were performed to achieve the performance standards and other requirements as specified in the Federal Consent Decree (CD) and attached Statement of Work (SOW; USEPA, March 30, 2005), and Local Communities Consent Decree (March 23, 2005).

The remedial action activities for Reach 5B were performed in accordance with the *Conceptual Mitigation and Restoration Design Plan* (BBL, 2005a), *Common Scoping and Planning Documents for the Remedial Action at the Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant, Volumes 1, 2, and 3* (Common Scoping and Planning Documents, BBL, 2005b), and *Final Design/Remedial Action Work Plan – Reach 5B for the Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site* (Reach 5B FD/RA Work Plan, BBL, 2006).

1.2 Description for Reach 5B

Reach 5 is approximately 16,100 feet long in its entirety and extends along the West Branch DuPage River from the STP, past the confluence, to Williams Road. Due to the length of Reach 5, this reach has been further divided into five sub-reaches, which include Reach 5A (just upstream of the STP Outfall to Gary's Mill Road), Reach 5B (Gary's Mill Road to the Kress Creek/West Branch DuPage River confluence), Reach 5C (Kress Creek/West Branch DuPage River confluence to Mack Road), Reach 5D (Mack Road to River Oaks), and Reach 5E (River Oaks to Williams Road). This Final Completion Report focuses solely on the remedial action activities that were completed for Reach 5B. Reach 5B is located exclusively within the Roy C. Blackwell Forest Preserve, and the removal activities in Reach 5B was predominately located in the floodplain on both banks of the river, with limited removal within the river bed. A site location map is provided in Figure 1-1.

1.3 Performance Standards

The performance standards for the remedial action in Reach 5B are as follows:

1. Removal of Material to Pre-Determined Elevations

Tronox will remove targeted soils and sediment from the Sites to pre-determined Global Positioning System (GPS) survey points in accordance with the CDs. The pre-determined points for the areas within Reach 5B are

presented in the Excavation Verification Plan, which is included in Appendix A-2 of the Reach 5B FD/RA Work Plan (BBL, 2006).

2. Restoration and Mitigation Activities

Tronox shall restore and mitigate impacted areas and perform monitoring and maintenance activities in accordance with the *Conceptual Mitigation and Restoration Design Plan* (BBL, 2005a), the Reach 5B restoration plan (Appendix B of the Reach 5B FD/RA Work Plan) and Section 2.1.6 of the Reach 5B FD/RA Work Plan (BBL, 2006).

1.4 Report Organization

This report was prepared in accordance with the requirements specified in Section 4.3 Final Completion Report(s) of the CD (Appendix K), as well as Section 2.7 in the Reach 5B FD/RA Work Plan (BBL, 2006). This report summarizes the remedial action construction and restoration activities performed for Reach 5B, and has been divided into the following sections:

- Section 1 – Introduction
- Section 2 – Remedial Action Summary
- Section 3 – Design Deviations
- Section 4 – Quality Assurance and Quality Control
- Section 5 – Record Drawings
- Section 6 – Representative Project Photographs
- Section 7 – Records of Removal Quantities and Off-Site Waste Disposal
- Section 8 – Monitoring of Restoration/Mitigation Areas
- Section 9 – References

1.5 Document Control

The project records (Documents) required by the CD for the subject remedial actions have been prepared and are maintained in the file room at the Tronox offices located at the REF, in the custody of Tronox's Document Control Group. Records are periodically transferred to the Tronox's records management center in Oklahoma City, Oklahoma.

A copy of Tronox's project file index can be found in Appendix A. These Documents shall remain on file in accordance with the CD pursuant to the requirements of USEPA. At the end of the required retention time, USEPA will be notified at least 90 days prior to document destruction and will be given the opportunity to assume custody of the Documents if requested.

1.6 Good Faith Estimate of Total Costs Incurred

Tronox estimates that the total cost for completing the remedial action for Reach 5B is approximately \$11,131,557.

This good faith cost estimate for Reach 5B is based on the primary remedial construction activities that occurred from August 1, 2006 to October 31, 2006, as well as the remaining restoration activities that were completed in 2007 and 2008.

2. Remedial Action Summary

This section summarizes the major tasks and presents a chronological description of major remedial action activities performed in Reach 5B.

2.1 General

In September 2003, Tronox retained ARCADIS (formerly known as ARCADIS BBLES and BBL Environmental Services, Inc.) to implement the remedial action at the Sites. The remedial action consisted of excavation of “targeted materials,” as defined in the CD, and site restoration. A series of verification points were established that defined the horizontal locations and vertical elevations of excavation limits. These predetermined verification points along with other remedial design criteria were adhered to during the remedial action to monitor the work performance. Any deviations from the design submittals are discussed in Section 3 of this report.

In addition to the Reach 5B FD/RA Work Plan (BBL, 2006), a number of relevant project documents have been prepared and followed during the implementation of the remedial action construction, restoration, and monitoring. Below is a list of these documents:

- Conceptual Mitigation and Restoration Design Plan (BBL, 2005a)
- Common Scoping and Planning Documents (BBL, 2005b)
 - Document 200: Quality Assurance Project Plan (QAPP)
 - Document 300: Construction Quality Assurance Plan (CQAP)
 - Documents 400 and 401: Health and Safety Plans (HASPs)
 - Document 500: Emergency Contingency Plan
 - Document 600: Dust Control Plan
 - Document 700: Air Monitoring Plan
 - Document 800: Global Positioning System Verification Plan

- Document 900: Targeted Material Stabilization Plan

2.2 Description of Remedial Action Activities

Tronox, through its own personnel and qualified contractors, completed the majority of the remedial action activities for Reach 5B between August and October 2006. The remaining restoration activities for Reach 5B were performed in 2007 and May and June 2008. The remedial action activities consisted of five major tasks. These major tasks and a description of some typical activities performed under each task are as follows:

- Site Preparation – Activities performed prior to excavation, including utilities clearance, setup of temporary construction facilities, work force mobilization, and installation of erosion and sedimentation controls, haul roads, staging areas, and river water diversion measures.
- Overburden Removal and Verification – This included excavation of overburden material, excavation limits verification using survey grade GPS and Total Station Land Surveying Equipment, verification sampling of overburden material for reuse using gamma ray survey technology by a field health physics technician followed by composite soil sampling and analysis, and stockpiling of overburden for reuse
- Excavation and Disposal of Targeted Materials – This includes removal of targeted materials to predetermined verification points, verification of excavation limits using survey grade GPS and Total Station Land Surveying Equipment, and direct loading or stockpiling/loading and transport of excavated targeted materials to the REF for subsequent off-site transportation (via rail) and disposal.
- Excavation Verification – This includes GPS survey verification of excavation depths in accordance with the GPS Verification Plan (Document 800), comparison of as-built excavation data to the verification points, preparation of GPS verification packages, and notification to USEPA, Illinois Emergency Management Agency/Division of Nuclear Safety (IEMA/DNS), USEPA remedial project manager/on-scene coordinator (RPM/OSC), and Local Communities Representatives of verification results.

- Restoration – Activities to restore the site for beneficial use including backfilling, topsoil placement and seeding, installation of erosion control measures, planting of trees and shrubs, and other riverbank and in-channel restoration/enhancement elements.

2.3 Chronological Narrative of Remedial Activities Performed

A chronological narrative of the remedial action activities performed in Reach 5B is presented below.

Pre-Construction Activities

The following steps were completed prior to commencing excavation and restoration activities for Reach 5B:

- On July 14, 2006 USEPA granted an interim approval to proceed with site preparation work in Reach 5B. On August 11, USEPA approved the Reach 5B FD/RA Work Plan (BBL, 2006).
- On August 8, 2006 Christopher B. Burke Engineering West, Ltd. (CBB West) and USEPA granted interim approval for the excavation of the bypass sump and installation of steel sheetpiling for the diversion and backflow dams.
- In August 2006 CBB West, on behalf of the Local Communities, approved the Reach 5B FD/RA Work Plan (BBL, 2006).
- On August 8, 2006, a pre-construction meeting was held for the remedial work in Reach 5B at the REF in West Chicago, Illinois, and was attended by Tronox, ARCADIS, the regulatory agencies (i.e., USEPA, USEPA RPM/OSC, IEMA/DNS, and City of West Chicago), and the Local Communities' representatives (i.e., CBB West).
- On September 7, 2006 CBB West, on behalf of the Forest Preserve, and acting in the capacity as the Local Communities Representative, accepted the cost estimate for the Reach 5B additional enhancements requested by the Forest Preserve and approved the initiation of the work.
- Prior to use, the source of borrow soil to be used as backfill was identified and the potential borrow soil was tested to verify that it had met the project criteria

for backfill. Testing results of borrow soil are provided in Appendix G kept on file at the REF in West Chicago, Illinois.

- USEPA, IEMA/DNS, the City of West Chicago and the Local Communities Representative were notified in advance of the Tronox's intent to perform GPS Verification Survey on a weekly basis.

Remedial Action Activities

A chronological description for remedial activities performed at Reach 5B are presented below:

- Work force mobilization and site preparation for Reach 5B began on July 17, 2006 and was completed in August 2006 including site clearing, construction of access/haul roads and staging areas, installation of bypass pumping systems, installation of steel sheeting for the upstream diversion and the downstream backflow dams, and installation of the downstream velocity dissipation system.
- The bypass pumping and dewatering systems were operated in Reach 5B between August 22 and September 30, 2006.
- The relocation of fish and mussels was performed in Reach 5B within the dewatered areas on August 22 and 23, 2006.
- Excavation of overburden and targeted materials in Reach 5B began on August 22, 2006 and was completed on September 9, 2006. Wetland topsoil from the Forest Preserve's property within Reach 5B was excavated concurrently with the remedial activities and was stockpiled for reuse during site restoration in Reach 5B.
- Field verification of overburden and targeted material excavation limits for Reach 5B was performed with survey grade GPS and Total Station Land Surveying Equipment to demonstrate that the performance standards for overburden segregation and targeted material removal were met. GPS verification points achieved for areas in Reach 5B were summarized and distributed as the excavation work progressed. A list of these GPS survey data summaries is provided in Appendix B.

- On November 8, 2006, the Notification of Successful GPS Verification Survey packages for the bottoms of overburden and targeted material for all the Reach 5B areas were distributed to the regulating agencies and Local Communities' representatives, and are provided in Appendices C and D, respectively. Through the GPS packages distribution, the regulatory agencies and Local Communities' representatives were notified of the results of the GPS Verification Survey for the removal of overburden and targeted material in Reach 5B.
- Air quality was monitored during the excavation of overburden and targeted materials during the remedial activities in Reach 5B, and the air monitoring data were summarized each month and included in the monthly progress reports that were distributed by Tronox to the regulating agencies and Local Communities' representatives.
- Excavated soils and other materials (e.g., roots, tree stumps) containing targeted material were transported to the REF where they were managed under the IEMA/DNS Radioactive Material License #STA-583 and subsequently loaded on railcars and transported under the Tronox LLC US DOT Exemption #DOT-E-11075 to the Energy Solutions Facility (State of Utah - 11e.(2) By Product Materials License #UT2300478) for final disposal.
- During the remediation of Reach 5B, water column monitoring was performed upstream and downstream of active remedial areas on a daily basis to identify and respond to potential water column impacts, if necessary. The monitoring data were compiled and summaries are provided in Appendix E.
- Restoration of the Reach 5B areas that were disturbed by the project was performed in October and November 2006. Restoration activities included backfilling, grading of excavation and disturbed areas, placing topsoil, hydroseeding of topsoil, installing erosion control blankets along stream bank, placement of river rock and boulder clusters, and planting of new trees and shrubs and protective fencing. A temporary construction fence was installed across the construction entrances to the staging areas at Gary's Mill Road and Route 59 to restrict site access during the winter shutdown period. Final grading and the post-construction channel profile are shown on the Record Drawings. These drawings show the elevations of existing and created pools in the river channel. A summary of the post-remediation pool characteristics is

presented in Table 2-1. A summary of impacted wetlands and in-channel enhancements is presented in Table 2-2.

- On May 15 and 16, 2007, the remaining sheetpile left in place in 2006 for the Reach 5B backflow dam/Reach 5C upstream diversion dam was removed.
- In June 2007, the remaining wetland topsoil in Reach 5B was removed to achieve the designed final grade for restoration. The remaining wetland soil was transported to the staging area located at Mack Road for use in downstream reaches.
- Planting of trees and shrubs in Reach 5B began in May 2007 including installing herbivore protection and mulch. As of October 31, 2007 the planting for Reach 5B was approximately 85% completed. The remaining planting of containerized plants in Reach 5B was completed in May and June 2008.
- On May 30, 2008, ARCADIS posted on the Tronox library website the final vegetation restoration, grading plan and restoration application record drawings for Reach 5B for regulatory review and field verification.
- On June 12, 2008, the Post-Construction Inspection Walk-Through for the remedial construction work in Reach 5B was performed with regulatory agencies, Local Communities' representatives, Tronox, and ARCADIS in attendance. Seven punchlist items were identified and the punchlist was issued by ARCADIS on June 16, 2008; punchlist items were completed by June 25, 2008.
- On June 25, 2008, ARCADIS formally issued the Post-Construction Inspection Report for Reach 5B to the regulatory agencies. In the Post-Construction Inspection Report, it was noted that all the remedial construction and restoration work items for Reach 5B, including the punch list items that were generated during the June 12, 2008 final site inspection, were completed by June 25, 2008.
- Upon the conclusion of the remedial action construction and restoration activities for Reach 5B, the mitigation and restoration monitoring activities for Reach 5B began on June 25, 2008. It should be noted that the results of the mitigation and restoration monitoring activities for Reach 5B will be included in

the 2008 Annual Monitoring Report and the subsequent annual monitoring reports.

2.4 Backfill Materials

Two primary types of backfill materials were used as backfill for site restoration in Reach 5B; these included overburden material and imported backfill materials. A description of these backfill materials is presented below.

Overburden Material Used as Backfill

Overburden soil was stockpiled at dedicated staging areas for subsequent gamma survey and sampling to demonstrate that the material did not exceed the approved cleanup criterion. Following gamma surveying and soil sampling, USEPA and IEMA/DNS representatives performed an independent survey of the stockpiled materials prior to their approval of the use of overburden as backfill. Overburden testing and sampling results are on file at the REF and are included in Appendix F. Approximately 140 loose cubic yards of overburden were generated and reused for backfill to restore Reach 5B. The majority of the overburden material had to be processed as targeted material because the large vegetative root systems did not allow for segregation of overburden and targeted materials.

Imported Backfill Materials

Imported backfill materials were identified and tested prior to being imported to the Sites for use in accordance with Document 200 of the Common Scoping and Planning Documents. The imported material sampling data are provided in Appendix G. The source of the wetland topsoil used for backfill and topsoil in Reach 5B was the Forest Preserve's deep overwintering pool excavation on the east side of Reach 5B on Forest Preserve property. The source for river rock was Earth Inc. located at 455 West Bartlett Road, Bartlett, Illinois 60103.

3. Design Deviations

This section describes deviations from the design submittals associated with the Reach 5B FD/RA Work Plan (BBL, 2006) and the Common Scoping and Planning Documents during the implementation of the remedial action. Deviations are documented in three types of project documents, which include Non-Conformity Reports (NCRs), Corrective Action Reports (CARs), and Interim Change Notices (ICNs). In addition, quality system audits are performed periodically. Audit findings are documented as audit corrective action reports (ACARs), and the ACARs are classified as either a major or minor finding.

Non-Conformity Reports (NCR)

There were no NCRs issued for the remedial action work performed to implement the Reach 5B FD/RA Work Plan (BBL, 2006).

Corrective Action Reports (CAR)

There was one CAR issued for the remedial action work performed to implement the Reach 5B FD/RA Work Plan (BBL, 2006). There were no ACARs issued for the work in Reach 5B. A brief summary of the CAR is provided below:

CAR No. WB-2006-001 was issued on September 11, 2006 to document corrective action for Reach 5B in the case where the GPS survey data for overburden point R5B-9-7957t was not recorded while performing GPS verification of overburden removal in Excavation Area R5B-9 on September 8, 2006. The GPS surveying field check list was reviewed with the survey crews and the corrective action was completed on September 22, 2008.

Interim Change Notices (ICN)

There were two ICNs issued for the Reach 5B remedial action activities. A brief summary of each ICN is provided below.

- ICN No. 1 for Reach 5B was issued on October 24, 2006 to Volume 1 of 2, Figure 2-1 of the Reach 5B FD/RA Work Plan (BBL, 2006) to document a proposed change to the upstream and downstream water column monitoring locations for Reach 5B. This ICN was approved by USEPA via an e-mail

dated October 2, 2007 and by CBB West via an e-mail dated November 1, 2006.

- ICN No. 2 for Reach 5B was issued on October 24, 2006 to Document No. 106, Appendix E for the Reach 5B FD/RA Work Plan (BBL, 2006) to document a proposed change to the relocation of the backflow dam. This ICN was approved by USEPA via an e-mail dated October 2, 2007 and by CBB West via an e-mail dated November 1, 2006.

In addition to these reach-specific ICNs, thirteen ICNs have been issued to update the Common Scoping and Planning Documents. These ICNs are summarized in Table 3-1.

In addition to the restoration applications included in the approved FD/RA Work Plan for Reach 5B, CBB West, acting on behalf of the Forest Preserve, authorized additional enhancements to be performed in Reach 5B in accordance with CBB West's e-mail and drawing attachments dated July 14, 2006. The additional enhancements consisted of installations of vortex weirs, bendway weirs, hummocks and hollows, bank loading with river rock, boulder clusters and tree crowns and root wads. This work was performed by Tronox, in accordance with the Consent Decree, as a credit against Tronox's obligation for additional enhancements. The restoration application record drawings (Drawings B-9A and B-9B) in Appendix H illustrate the locations of the additional enhancements that were installed.

There were instances where the FD/RA Work Plan details in Reach 5B were modified in the field to adjust to field conditions or to adopt better construction practices. The impact of these modifications on the actual limits of disturbance has been documented on the record drawings in Appendix H. Examples of these field modifications that were implemented include the following:

- The limits of disturbance were modified as necessary and as field conditions dictated. For example, the original plans showed the access road being located in the riverbed. However, it became apparent during initial construction activities that the dewatered riverbed would not withstand the construction equipment traffic and would quickly become deeply rutted and muddy. Therefore, the access road was relocated to the west bank, which created a larger disturbance area than originally planned.

- The vegetation restoration plans were modified based on detailed communication with CBB West regarding the tree and shrub planting plans.
- Variations from the design coordinates and elevations of the drillholes and boundary points recorded and are presented in Appendices C and D. In all cases all of the targeted material was excavated and removed.
- In the tables included in Appendices C and D, comments were noted for the points in areas where Tronox directed all of the overburden material to be excavated and handled as targeted material. This was done for reasons of cost effectiveness in areas with minimum thickness and/or volume of overburden material, or where deep roots prevented the easy separation of overburden from the underlying targeted material. It was also noted in the tables where over-excavation of target material was performed to address equipment rutting in a few areas.

4. Quality Assurance and Quality Control

The remedial action was performed under the auspices of an internally managed quality assurance (QA) program that was expressed in the form of a Quality Assurance Manual, which follows the international standard ISO 9000. The Quality Assurance Project Plan (QAPP; Document 200 of the Common Scoping and Planning Documents) was prepared in accordance with this manual. The QAPP was also prepared in accordance with USEPA QAPP guidance documents, in particular, the Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (QAMS-005/80), and the Region V Model QAPP (1991).

The QAPP provided positive management control and included procedures and requirements to establish a record of conformance. This QAPP established standard operating procedures, change notices and field work instructions, and provided the operational and administrative requirements for the successful excavation and restoration of the Reach 5B areas. Within this system, individual and organizational responsibilities were assigned for the activities and control measures necessary to achieve, verify, and document conformance. Adherence to this program, approved procedures, and regulatory compliance requirements were mandatory for all Tronox, ARCADIS, and ARCADIS subcontracted employees.

The key project Quality Assurance and Quality Control (QA/QC) elements associated with the remedial action at Reach 5B are as follows:

- Health and Safety – Work was performed consistently in a safe and healthy manner to protect site workers, residents from the surrounding community, and the environment by implementing best practices such as following HASP procedures, monitoring air quality, and controlling dust emission.
- Verification of Excavation Limits – Excavation limits for the overburden segregation and targeted material removal were verified with GPS Verification Survey and documented in the Notification of Successful GPS Verification Survey packages that were distributed to the regulators and are on file in Tronox's file room at the REF.
- Material Sampling - Overburden materials were sampled prior to reuse as backfill. Sources of borrow soil were tested before the soil was imported for site use. The documentation of the QA/QC testing is on file in Tronox's file room at the REF.

- Mitigation and Restoration Monitoring – Upon the completion of the remedial action, monitoring activities are carried out to evaluate the performance of the restored site. Performance standards were set such that adaptive management measures would be implemented should any deficiency be identified during the monitoring activities.

The results of the QA/QC activities are presented in appropriate project submittals or project files including GPS Verification Survey packages (Appendices C and D), Health and Safety records (on file), air monitoring and dust monitoring results (on file), sampling results of overburden and imported backfill materials (Appendices F and G), water column monitoring data (Appendix E), and annual reports summarizing the monitoring of performance standards for mitigation and restored areas (starting in 2008 for Reach 5B).

5. Record Drawings

The site final grading plans, vegetation restoration record drawings, restoration application record drawings and other restoration elements associated with the Reach 5B remedial action are documented in construction Record Drawings provided in Appendix H.

The record drawings were developed to reflect post-remediation conditions using the reach-specific design drawings as a base. All temporary structures (e.g., staging areas, haul roads, pumps, etc.) were removed from the drawings, and post-restoration survey information was incorporated to document final conditions at the site. Certain design drawings were not developed into record drawings (e.g., pre-construction plan and profile drawings) because the drawing would present redundant information or information that would not reflect the current conditions at the site.

6. Representative Project Photographs

Photographic documentation was performed during the project activities. Project photographs depicting the day's construction activities were included in the Quality Control Daily Reports that were compiled by ARCADIS. Representative project photographs highlighting the major construction activities in Reach 5B are provided in Appendix I.

7. Records of Removal Quantities and Off-Site Waste Disposal

During the remedial action for Reach 5B, two types of materials were removed, transported, and disposed off-site, which included:

- Targeted material; and
- Non-targeted material that was not used as backfill.

Descriptions of these removed materials and their management are presented below. Records for material shipping and disposal, including truck shipment Bills of Lading (BOL) and waste manifests, are kept on file at Tronox's file room located at the REF, and are available for inspection.

7.1 Targeted Material

A total volume of approximately 2,787 loose cubic yards of targeted material were loaded into trucks at the Reach 5B staging area and transported to the REF dump pad; each truck was covered with a tarp and given a BOL. The quantity records were based on the BOLs.

This material consisted of targeted material and tarps and plastic liners used for the targeted material staging area. The soil at the dump pad was then moved to the REF direct load-out stockpile area where they were managed under the IEMA/DNS Radioactive Material License #STA-583. As each stockpile was created, it was sampled to verify radiological characteristics and moisture content, and was subsequently loaded into weighed gondola railcars. The loaded railcars were then transported under the Tronox LLC US DOT Exemption #DOT-E-11075, via train, to Energy Solutions' (formerly known as Envirocare of Utah Inc.) Clive Disposal Site (State of Utah - 11e.(2) By Product Materials License #UT2300478) for final disposal at:

Interstate 80, Exit 49
Clive, Utah 84029
Phone: (801) 532-1330

A total of approximately 3,286 tons of targeted material generated from the Reach 5B remedial action were shipped and disposed of at Energy Solutions facility in Clive, Utah.

7.2 Non-Targeted Material Not Used as Backfill

During site preparation, excavation, and restoration phases of the project, non-targeted materials are sometimes excavated and deemed unsuitable as backfill. These materials are surveyed using a portable gamma ray detector by the field health physics technician to verify that they did not meet the definition of targeted material prior to being disposed off site. In Reach 5B, there were no non-targeted excavated materials that were not suitable for backfill.

8. Monitoring of Restoration/Mitigation Area

8.1 Introduction

Previous sections of this report summarized the remedial and restoration activities performed in Reach 5B, and Record Drawings (Appendix H) were prepared to document the locations that the various seed mixes were applied and the species and locations of planted trees and shrubs.

The *2008 Annual Monitoring Report* will contain the results of monitoring and maintenance activities conducted in Reach 5B to evaluate the health and progress of seeded and planted vegetation, the stability of restored banks and in-stream habitat structures in the reach, and the development of upland and wetland habitats towards meeting vegetation performance standards.

Monitoring of the restored banks, structures and habitats is required by the Statement of Work attached to the CD. The monitoring requirements are consistent with the methodologies presented in the *Conceptual Mitigation and Restoration Design Plan (CMRDP)* (BBL, 2005a) and the Reach 5B FD/RA Work Plan (BBL, 2006), which were reviewed and approved by the USEPA and representatives of the Local Communities. The final Reach 5B inspection and acceptance of the completed construction work by USEPA and the Local Communities occurred on June 25, 2008, at which time the monitoring period began.

Restored banks, structures and vegetative communities will be monitored annually during the spring (May/June) and/or peak growing season (July/August) of each required monitoring year to evaluate stability and to collect quantitative vegetation data for comparison to performance standards. Table 8-1 summarizes the site-specific monitoring activities and performance standards for Reach 5B. Each required year of vegetation monitoring will terminate at the completion of the summer monitoring event conducted during the peak growing season. The first year of bank and structure monitoring will terminate with the completion of an inspection 10 to 14 months after their construction. Subsequent annual bank and structure monitoring events will occur 10 to 14 months after the previous monitoring event.

8.2 Qualitative Spring Inspection

Qualitative inspections of restored areas, consisting of visual inspection of restored banks, structures and habitats in Reach 5B, will occur in the spring of each year and

may occur throughout the year to evaluate stability and vegetation status and to determine if any maintenance activities are required to meet performance standards. Observations made during qualitative inspections will be photo documented as field conditions permit (e.g., low enough water levels to observe banks and structures). Activities to be conducted during the summer monitoring event are described below.

8.3 Quantitative Summer Monitoring Event

The status of the restored banks, structures and habitats of Reach 5B will be evaluated during the summer inspection with regard to their ability to meet specific performance standards. The quantitative summer inspection will occur in July or August and will consist of herbaceous vegetation data collection, assessment of the health of planted trees and shrubs, and photo-documenting the development of restored areas over time. Table 8-1 summarizes the data collection requirements and performance standards for the quantitative monitoring efforts. Details of the components of the summer monitoring effort are provided in the following sections.

8.3.1 Bank Inspection

Bank stability monitoring is required to be performed for three years, with at least one event occurring after a storm that equals or exceeds the bankfull (approximately a 2-year recurrence frequency) discharge of 512 cubic feet per second (cfs) (*Conceptual Design Report*, BBL, 2002). During bank inspection, restored banks will be inspected for signs of erosion that would jeopardize the integrity of the bank. The limits of a "bank" extend from the toe of slope to the first observable break in slope. Signs of significant erosion include toe erosion causing undercutting, lateral erosion above the rock protection, exposed geotextile fabric, or vertical erosion down the face of the bank from overland flow entering the river. Stability will be evaluated by visual observation and comparison to record drawings, considering location in the stream, physical dimensions, and designed hydraulics. Bank areas found to be significantly eroding will be repaired in accordance with a maintenance activity design report that will be generated prior to the initiation of any major maintenance activity.

8.3.2 Herbaceous Vegetation Monitoring

The vegetation of restored banks and upland and wetland habitats will be monitored to document the progress of the vegetation development towards the vegetation performance standards of 85% ground cover in uplands, 90% cover in wetlands, less than 15% cover by invasive species in restored bank areas, and less than 5% invasive

species in uplands (Table 8-1). Invasive upland species include, but are not limited to: Common Reed (*Phragmites australis*), Annual Blue Grass (*Poa compressa*), Kentucky Blue Grass (*Poa pratensis*), Smooth Brome (*Bromus inermis*), Tall Fescue (*Festuca elatior*), Quack Grass (*Agropyron repens*), Sandbar Willow (*Salix interior*), Common Buckthorn (*Rhamnus cathartica*), Glossy Buckthorn (*Rhamnus frangula*), Honeysuckle (*Lonicera spp.*), and Reed Canary Grass (*Phalaris arundinacea*).

Trees and shrubs were planted on Forest Preserve Property based on the actual limits of disturbance. A memo summarizing the area of Forest Preserve property disturbed was submitted to CBB West on February 11, 2008. The figure depicting the area of disturbance to Forest Preserve Property in Reach 5B is included in Appendix J.

Monitoring of herbaceous vegetation will utilize 1-square meter sample plots located randomly in restored vegetation areas. The numbers of plots that will be utilized in each restoration area are presented in Table 8-1. The random plot locations will be identified prior to entering the field using a random number generating program to select gridline intersections of a grid superimposed over the site. In the field, data collected from each plot will consist of the visually estimated percent ground cover, the identification of all plant species present in the plot, and the visually estimated percent cover of each species in the plot. The percent ground cover of a restoration area will be represented by the average percent cover values observed in all plots in that restoration area. The average percent ground cover will be compared to the site-specific performance standard presented in Table 8-1 to determine if the performance standard is met or if repairs are required to meet the performance standard by the third growing season. Corrective actions will be performed in accordance with a maintenance activity design report that will be generated prior to the initiation of any major maintenance activity or repair.

The following additional herbaceous vegetation-related performances standards apply to vegetation of uplands on Forest Preserve property, publicly owned recreational properties and all restored and created wetland areas:

- At least 90% of exposed areas will be vegetated by the end of the first three growing-season months (i.e., after July 1).
- By the end of the third full year after planting no area over the entire vegetated restoration area greater than 0.5 square meters should be devoid of vegetation.

- The relative importance value of total native plants (RIV_n) shall increase from the end of the first full growing season to the end of the third full growing season after planting. The RIV_n is calculated by first calculating relative frequency (RF_s) and relative coverage (RC_s) of each species in each quadrat. RF is the measure of the level of occurrence of a single species in a given plant community. RC is the percentage of area occupied by a single species in a given plant community where the sum of the species' cover in that community equals 100%. The relative importance value (RIV_s) of each native species is then calculated by the equation:

$$\frac{RF_s + RC_s}{2 \times 100} = RIV_s$$

- A native mean Coefficient of Conservatism value or C (native mean C value) of greater than or equal to 3.5 shall be achieved for the entire restoration area by the end of the third year after planting. The C value is the measure of native plant community quality established by Swink and Wilhelm (1994). A Floristic Quality Index (FQI), which is a plant community measure of the C value, will also be calculated by multiplying the C value by the square root of the number of native species. The C value and FQI must increase from the first to the third year after planting.
- If the native mean C value, native FQI and/or RIV_n have not increased from the first to the third growing season, appropriate corrective actions will be taken to achieve the restoration intent of the design.
- By the end of the third full year after planting, none of the three most dominant plant species in the restoration areas may be non-native species or weedy species including: Cattail (*Typha spp.*), Common Reed (*Phragmites australis*), Annual Blue Grass (*Poa compressa*), Kentucky Blue Grass, (*Poa pratensis*), Purple Loosestrife (*Lythrum salicaria*), Sandbar Willow (*Salix interior*), Barnyard Grass (*Echinochloa crusgalli*), Common buckthorn (*Rhamnus cathartica*), Glossy Buckthorn (*Rhamnus frangula*), Honeysuckle (*Lonicera spp.*) or Reed Canary Grass (*Phalaris arundinacea*).

Vegetation metrics related to percent cover will be calculated from the vegetation plot data. Species-specific data collected from the vegetation plots will be utilized to calculate the Mean C value, FQI and RIV_n metrics, where required, for evaluation against performance standards for these metrics that require an increase in each

metric from the first growing season to the end of the third growing season. The performance standard requiring no areas larger than 0.5 square meters to be devoid of vegetation will be evaluated based on a site walkover specifically for that purpose. Areas greater than 0.5 square meters in size will be noted and corrective actions will be performed in accordance with a maintenance activity design report that will be generated prior to the initiation of any major maintenance activity.

8.3.3 Tree and Shrub Survival Monitoring

The performance standard for tree and shrub survival in restored areas is 90% survival. The Record Drawings presented in Appendix H show the locations and provide a summary of the new trees and shrubs planted in Reach 5B as part of the restoration effort. These Record Drawings reflect any revisions made since approval of the Reach 5B FD/RA Work Plan (BBL, 2006) related to landowner and Local Community representative input, or changes in the actual limits of disturbance from the limits anticipated at the time of plan preparation.

The Record Drawings provide the baseline numbers of trees and shrubs for assessment of tree and shrub survival. Due to the relatively low number of trees and shrubs planted in Reach 5B, the percent tree and shrub survival will be based on visual assessment of the health of all planted trees and shrubs. Individual counts are more efficient and more accurate in small areas with few plantings than the sub-sampling quadrat method originally proposed in the CMRDP.

Surviving trees and shrubs should exhibit healthy and abundant leaves, live buds, vertical orientation, no exposed roots, and green inner bark. Naturally recruited non-invasive tree and shrub species that are observed in restoration areas will be included in tree and shrub counts. The number of surviving and recruited tree and shrubs in the reach will be divided by the number of trees and shrubs originally planted in the reach to calculate the percent survival in Reach 5B. Areas that will not meet the 90% survival performance standard by the third monitoring event will receive supplemental plantings in accordance with a maintenance activity report that will be generated prior to the initiation of any major maintenance activity.

8.3.4 In-Stream Structure Monitoring

As general practice where required, monitoring of constructed in-stream habitat structures will be performed for a minimum of 3 years to evaluate stability and to respond to maintenance needs. The Record Drawings in Appendix H provide the

locations, dimensions, and orientation of each constructed in-stream habitat structure, as well as provide the baseline conditions to which the observed condition of each structure will be compared to assess the stability and functionality of the structure. Constructed structures that have experienced bankfull flow conditions will be inspected to evaluate their stability and function. The stability of in-stream structures will be evaluated at least once after a bankfull flow event. The stability assessment will consist of visual observations of condition during the inspection and a comparison to structure design presented on the Record Drawings, considering location in the stream, physical dimensions, and designed hydraulics.

Monitoring of restored in-stream structure and habitat complexes will be performed annually during low-flow conditions to maximize the visibility of the exposed portions of the structure. If it is determined that aquatic structures have been comprised to the extent that they are not functioning as intended, then maintenance activities will be performed in accordance with a maintenance activity design report that will be generated prior to the initiation of any major maintenance activity.

8.3.5 Photo Documentation

Photographs will be taken of restored areas to document observations of restored banks and constructed structures, and to provide a record of vegetation development over time. Permanent photograph locations will be established in the field to provide documentation of vegetation development. A labeled wooden stake will be installed at each permanent photo location and its location will be instrument surveyed so it can be reproduced for subsequent monitoring events if the stake is removed or lost.

Photographs with captions describing the location and direction of photograph will be provided in a photo log attachment to the Annual Monitoring Report.

8.4 Report Preparation

An Annual Monitoring Report will be prepared each year of the required monitoring period. The first Annual Monitoring Report that will address Reach 5B will be issued following the 2008 growing season. This monitoring report will summarize the observations during the field monitoring activities, present data tables with the required vegetation metrics calculations, and provide photographs of restored areas from permanent locations to document the temporal development of vegetation.

If the restoration monitoring standards presented above are not achieved in Reach 5B within three years of the completion of restoration, appropriate corrective restoration

measures will be performed in accordance with a maintenance activity report that will be generated prior to the initiation of any major maintenance activity. If the restoration monitoring standards presented above are achieved in Reach 5B within their required monitoring period, the restoration will be deemed successful and no further maintenance or monitoring will be required or performed.

9. References

- BBL. 2002. *Conceptual Design Report – Kress Creek/West Branch DuPage River.* DuPage County, IL. 2002.
- BBL, 2004. Remedial Investigation Report - Kress Creek/West Branch DuPage River and Sewage Treatment Plant Sites, Dupage County, IL, 2004.
- BBL, 2005a. Conceptual Mitigation and Restoration Design Plan, February 2005.
- BBL, 2005b. Common Scoping and Planning Documents for the Remedial Action at the Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site, May 2005.
- BBL, 2006. Final Design/Remedial Action Work Plan – Reach 5B for the Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site, Volumes 1 and 2, August 2006.
- Swink, F. and G. Wilhelm. 1994. *Plants of the Chicago Region.* 4th Edition. Indianapolis: Indiana Academy of Science, 1994

ARCADIS

Tables

Table 2-1

**Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site
Final Completion Report - Reach 5B**

**Tronox LLC
DuPage County, Illinois**

Summary of Pool Characteristics

Pool Number	Pre-Remediation		Post-Remediation	
	Area (sq ft)	Maximum Depth Below Bed (ft)	Area (sq ft)	Maximum Depth Below Bed (ft)
1	983	0.2	405	1.78
2	1,693	0.5	677	1.21
3	12,132	0.4	10,941	1.86
4	1,880	0.7	593	0.92
Supplemental Pool 1	NA	NA	2527	3.89
Supplemental Pool 2	NA	NA	142	1.37
Supplemental Pool 3	NA	NA	142	0.93
Volume (ft3)	6,643		32,593	

Note:

1- Pool locations are shown on Record Drawings B-9A and B-9B.

Table 2-2

**Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site
Final Completion Report - Reach 5B**

**Tronox LLC
DuPage County, Illinois**

Wetland and In-Stream Habitat Impact and Mitigation Summary

Wetlands (Acres)				In-stream Habitats (Linear Feet)		
Wetland Type	Anticipated Wetland Impacts	Actual Wetland Impacts	Wetland Mitigation in Reach 5B	Impacted	Mitigated	Supplemental DCFP Enhancements
Wet Meadow	0.18	0.69	0.44	535	1,093	1,245
Forested	0.45	1.50	0	NA	NA	NA
Fen	0.02	0.01	0			

Table 3-1

Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site
Final Completion Report - Reach 5B

Tronox LLC
DuPage County, Illinois

Summary of Interim Change Notices (ICNs)

ICN No.	Referenced Document	Description of Change	Date Issued	Date Approved/Acknowledged by Regulators
Final Design / Remedial Action Work Plan - Reach 1				
1	106, Appendix E	Changing to a single bypass sump using Pool No. 7	E-Mailed on 11/1/2005, hard copies issued on 3/24/06	USEPA and CBB West 11/2/05
2	102, Figure A and Tables	Revised boundary points at May St. culvert, and clarification of redundant boundary points in Reach 1 & 2.	E-Mailed on 11/3/2005, hard copies issued on 3/24/06	USEPA 11/4/05, CBB West 11/3/05
Final Design / Remedial Action Work Plan - Reach 2				
1	106, Appendix E	Changing to a single bypass sump using Pool No. 7	E-Mailed on 11/2/2005, hard copies issued on 3/24/06	USEPA 11/4/2005, CBB West 11/3/05
2	102, Figure A and Tables	Revised boundary points at May St. culvert, and clarification of redundant boundary points in Reach 1 & 2.	E-Mailed on 11/3/2005, hard copies issued on 3/24/06	USEPA 11/4/05, CBB West 11/01/06
Final Design / Remedial Action Work Plan - Reach 3A, 3B and 4				
1	Volume 1, Figure 2-1	Revisions to the upstream and downstream water column monitoring locations	Hard copies issued on 8/9/2006.	USEPA 10/02/07, CBB West 11/01/06
2	Appendix A-2	Add points in Pod Nos. R5B-10 and R5C-3 to Reach 4	E-Mailed on 07/13/06, revised hard copies issued on 8/9/06	USEPA 07/14/06, CBB West 7/16/06
3	Drawing B-26	Substitute native creeping bent grass for lawn grass in Wetland 5B in Reach 4	Hard copies issued on 8/9/2006.	USEPA 10/02/07, CBB West 11/01/06
4	Drawing Nos. A-3B, A-5A and E-2	Combined Reach 3B and 4 into one bypass system, eliminated Reach 3B backflow dam and turbidity curtain.	Hard copies issued on 8/9/2006.	USEPA 10/02/07, CBB West 11/01/06
5	Appendix A-2	Transferred Route 59 bridge area points to subsequent separate work plan	E-mailed on 11/13/07, hard copies issued on 12/21/07.	USEPA 11/20/07, CBB West 11/26/07
Final Design / Remedial Action Work Plan - Reach 5B				
1	Volume 1 of 2, Figure 2-1	Revisions to water column monitoring locations	Hard copies issued on 10/24/06	USEPA 10/02/07, CBB West 11/01/06
2	Vol. 2, Appendix E, Drawings E-4 and E-5	Relocated backflow dam for Reach 5B to upstream of the confluence	Hard copies issued on 10/24/06	USEPA 10/02/07, CBB West 11/01/06
Final Design / Remedial Action Work Plan - Reach 5C and 5D				
1, Rev. 1	Volume 1 of 3, Section 2.1.1.9 River Diversion for Excavation	Utilization of three-sided sheetpile enclosure method for isolating, dewatering, excavating backfilling and restoring small defined sections in Reach 5C.	E-mailed copy issued on 10/10/06, hard copies distributed on 10/24/06.	USEPA approved via e-mail on 10/13/06, and CBB West approved via e-mail on 10/12/06.
2, Rev.1	Volume 1 of 3, Sections 2.1.1.5 and 2.1.1.7, Site Clearing and Haul Roads	Allowed clearing and installation of haul roads in winter of 2006-2007 in Reaches 5C and 5D to take advantage of frozen ground conditions to prevent rutting of equipment in excavation areas.	E-Mailed copy issued on 01/31/07, hard copies distributed on 09/11/07.	USEPA approved via e-mail on 10/02/07 and CBB West approved via e-mail on 02/01/07.
3, Rev.1	Volume 1 of 3, Appendix A-1, Drawing A-2D	Deleted access road across four properties on west side of river in Reach 5D, and enlarged sheetpile enclosure for Pod No. RSD-14. [Note: This ICN was originally issued as ICN No.2 to the Reach 5C and 5D FD/RA Work Plan. When it was discovered that ICN No.2 was previously issued for the winter clearing and haul roads, this ICN was revised to ICN No. 3 to the Reach 5C and 5D FD/RA Work Plan.]	E-mailed copy issued on 06/28/07, and additional hydraulic review summary was e-mailed on 07/1/07. Hard copies were issued on 07/13/07. Revised ICN cover form with corrected ICN No. 3, Revision 1 was e-mailed on 08/31/07. Hard copies of revised ICN No. 3, Revision 1 form issued on 09/11/07.	USEPA approved via e-mail on 07/06/07. CBB West approved via e-mail on 07/10/07.
4	Volume 1 of 3, Appendix A-2, Excavation Verification Plan	Adoption of the property specific Excavation Plan for Parcel No. 0427104002 at 29W530 Forestview Drive in Reach 5D.	E-mailed copy issued on 07/17/07, hard copies distributed on 09/11/07.	USEPA 10/02/07, CBB West 12/11/07
5	Volume 1 of 3, Appendix A-1, Drawings A-2C and A-2D	Revised the major river crossing layout in Reach 5D to be diagonal with a sheetpiling section on the east end to construct the eastern off ramp.	E-mailed copies issued on 08/31/07, hard copies distributed on 09/11/07.	USEPA 10/02/07, CBB West 12/11/07
6	Volume 3 of 3, Appendix E - Geotechnical Design, Drawing E-3	Revised the temporary minor river crossing detail by substituting a wooden mat underlayment in lieu of the river rock and geogrid underlayment in the original design.	E-mailed copy issued on 08/31/07, hard copies distributed on 09/11/07.	USEPA 10/02/07, CBB West 12/11/07
7	Volume 3 of 3, Appendix E - Geotechnical Design, Section 2.2, Drawing Nos. E-1 and E-2	Performed excavation of Pod Nos. RSD-17 and RSD-18 in Reach 5D South utilizing benching construction methods in lieu of upgradient sheetpiling due to field conditions encountered.	E-mailed copy issued on 09/18/07, hard copies distributed on 09/24/07.	USEPA 10/02/07, CBB West 12/11/07

Table 3-1

Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site
Final Completion Report - Reach 5B

Tronox LLC
DuPage County, Illinois

Summary of Interim Change Notices (ICNs)

ICN No.	Referenced Document	Description of Change	Date Issued	Date Approved/Acknowledged by Regulators
Final Design / Remedial Action Work Plan - Reach 5E and 6				
1, Rev. 1	Volume 1 of 3, Section 2.1.1.9 River Diversion for Excavation	Utilization of three-sided sheetpile enclosure method for isolating, dewatering, excavating backfilling and restoring small defined sections in Reach 5C.	E-mailed copy issued on 10/10/06, hard copies distributed on 10/24/06.	USEPA approved via e-mail on 10/13/06, and CBB West approved via e-mail on 10/12/06.
2	Document 100, Volume 1	To allow for interim approval to begin remedial activities in Reach 5E North while the Reach 5E and 6 FD/RA Work Plan is going through the regulatory review and approval process.	E-mailed copy issued on 08/31/07, hard copies distributed on 09/11/07.	On 09/05/07 USEPA and CBB West granted interim approval to begin remedial work in Reach 5E North while the final review and approval of the Reach 5E and 6 FD/RA Work Plan continues to completion.
3	Appendix A-1, Engineering Drawing A-2B	Revisions to minor river crossing layouts	E-mailed copy issued on 10/24/07, hard copies issued on 12/21/07.	USEPA approved on 11/06/07, CBB West approved on 10/28/07
4	Appendix A-1, Engineering Drawing A-2E	Addition of two floating bridge river crossings in Reach 6 South and new access roads on the east bank.	E-mailed final version on 03/24/08, hard copies issued 04/01/08.	USEPA approved on 04/01/08, CBB West approved on 03/24/08.
5	Document 100, Section 3-Schedule and Figures 3-1 and 3-2	Revised the Reach 5E and 6 Project Schedule, and the Overall Project Schedule to reflect use of a more appropriate (considering the current state of the economy) 5-day, 40-hour work week for 2008.	E-mailed on 03/18/08, hard copies issued on 04/01/08.	USEPA approved 06/10/08, CBB West approved 06/10/08
6	Document 100, Volume 1, Section Nos 2.2 Traffic Control and 2.5.2 Water Column Monitoring	Revised Traffic Control Plan to accommodate request from City Of Warrenville. Revised Water Column Monitoring to reflect bypass pumping was not being utilized in Reaches 5E and 6.	E-mailed on 05/29/08, hard copy to follow.	USEPA approved on 06/03/08, CBB West approved on 05/30/08.
7	Appendix B, Document 104, Drawing B-12A	Revisions to the Reach 5E Mitigated Wetland, in accordance with CBB West's Sketch 1 showing a reduced footprint and a new storm sewer section.	E-mailed on 06/05/08, hard copy to follow.	USEPA approved 06/10/08, CBB West approved 06/11/08
Common Scoping and Planning Documents				
1	400, BBL HASP	Updated BBLES' Health & Safety Plan, primarily adding new loss prevention system sections and quicklime handling.	Posted on website for regulatory review on 04/13/06, hard copies issued on 4/27/06.	N/A
2	New Document 900	Targeted Material Stabilization Plan	Posted on website for regulatory review on 04/13/06, hard copies issued on 4/27/06.	USEPA 4/14/06, CBB West 3/28/06
3	401, Sevenson HASP	Updated Sevenson's Health & Safety Plan, adding quicklime handling procedures and loss prevention updates.	Posted on website for regulatory review on 04/13/06, hard copies issued on 4/27/06.	N/A
4	New SOP 226 for Real Time Monitoring	SOP - 226 Operation of the TSI Model 8520 Dust Trak Aerosol Monitor	Posted on website for regulatory review on 04/13/06, hard copies issued on 4/27/06.	CBB West 11/01/06, USEPA 01/22/08.
5	WCP Nos. 607, 611, 632 and 652.	Incorporation of former Kerr-McGee WCP's into the Common Planning and Scoping Documents for railcar loading operations.	Hard copies issued 4/27/06	CBB West 11/01/06, USEPA 01/22/08.
6	New SOP-227, Fish Relocation Plan and SOP-228, Mussel Relocation Plan	New SOP's added to the Common Documents package for Fish Relocation and Mussel Relocation	Hard copies issued 5/5/06	CBB West 11/01/06, USEPA 01/22/08.
7	WCP 320 Radioactive Material Shipments	Updated WCP 320 to current CFR, and includes trucking requirements from excavation site to REF.	Hard copies issued 8/9/06	CBB West 11/01/06, USEPA 01/22/08.
8	Table of Contents (TOC)	Updated TOC to reflect additional documents added.	Hard copies issued 8/9/06	CBB West 11/01/06, USEPA 01/22/08.
9	Document 200 - OAPP, New SOP 229	Added SOP 229 Monitoring Well and Piezometer Decommissioning and updated Table of Contents for the Common Scoping and Planning Documents	Hard copies issued 05/08/07	CBB West 01/31/08, USEPA 01/22/08
10	Document 300 - Construction Quality Assurance Plan	Revised Section 02420 - Restoration/Mitigation	Hard copies issued 05/08/07	CBB West 01/31/08, USEPA 01/22/08
11	Document 102, Appendix A-2 Excavation Verification Plan	Updated tables from Consent Decree to current	E-mailed on 12/13/07, hard copies issued on 12/21/07.	CBB West 01/31/08, USEPA 01/22/08
12	WCP Nos. 607, 611, 632 and 652.	Deleted WCP 607 as non-applicable, updated WCPs 611, 632 and 652.	Hard copies issued 02/07/08	CBB West 06/10/08, USEPA 06/10/08
13	Document 400, 401 and 500	Updated Arcadis & Sevenson HASPs and Emergency Contingency Plan	E-mailed on 04/17/08, hard copies issued on 04/23/08	CBB West 06/10/08, USEPA 06/10/08

Table 8-1

**Kress Creek/West Branch DuPage River Site and the River Portion of the Sewage Treatment Plant Site
Final Completion Report - Reach 5B**

**Tronox LLC
DuPage County, Illinois**

Summary of Monitoring Requirements in Reach 5B

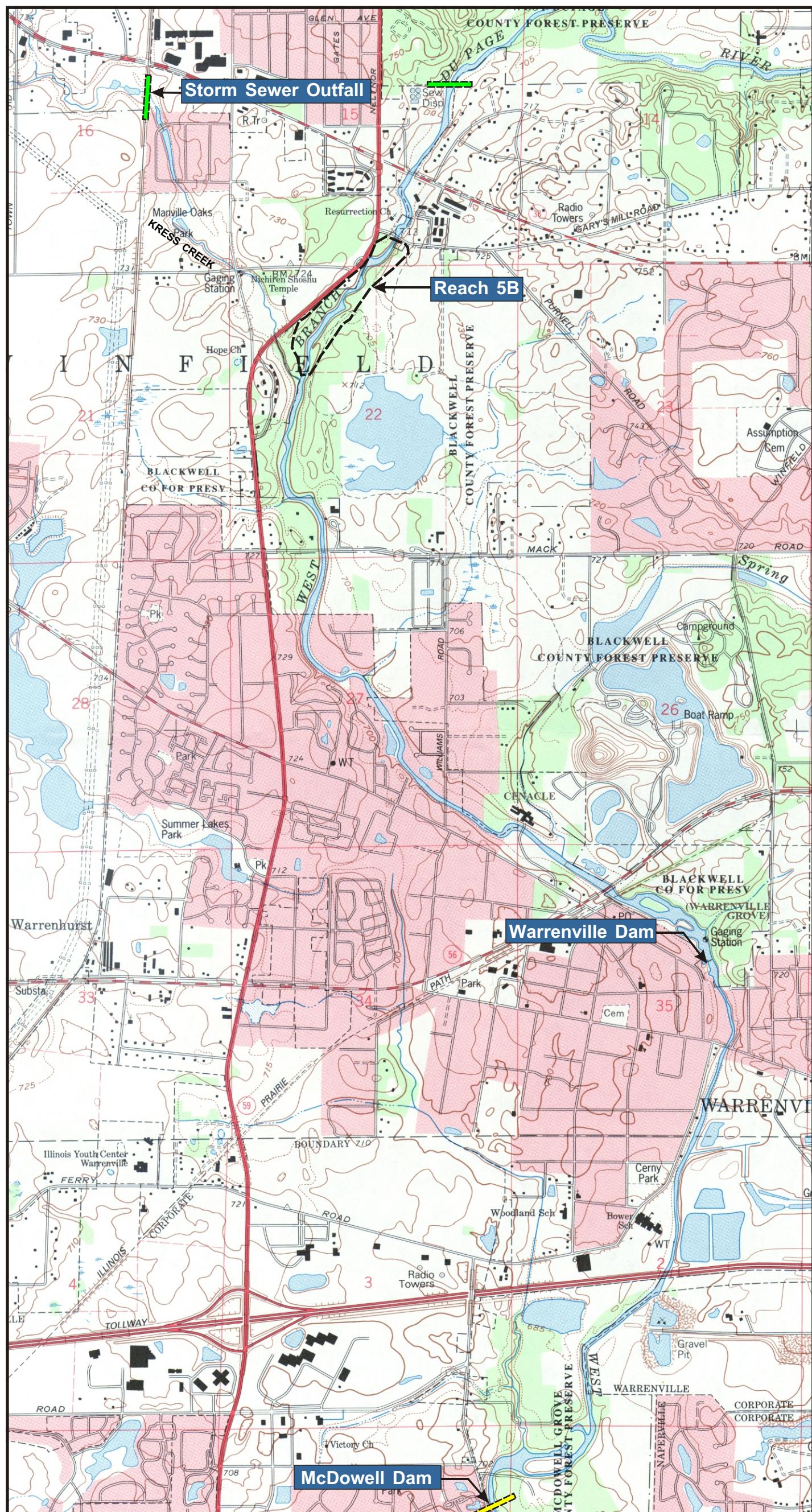
Habitat or Structure	Number or Quantity	Monitoring Endpoint	Monitoring Methodology	Performance Standard	Number of Herbaceous Vegetation Monitoring Plots	Monitoring Duration
Banks	2750 feet	Stability	Visual monitoring	Visual stability	NA	3 years
In-Stream Structures/Enhancements	26	Stability	Visual monitoring	Visual stability	NA	3 years
Riffles	3	Elevation	Survey	Elevation within 0.25-feet of design	NA	3 years
Pools	4	Elevation	Survey	Deeper than pre-disturbance	NA	3 years
Wet Meadow Wetlands	0.69	% Cover; Vegetation metrics	Vegetation data collection plots	90% Cover in 3 years; annual increase in Mean C, FQI, and RIV _n ; <5% cover of invasive weeds; No areas > 0.5 square meters void of vegetation	15	3 years
Forested Wetlands	1.5	% Cover; Woody plant survival	Vegetation data collection plots; Surviving woody plant counts	90% Cover in 3 years; 90% woody plant survival; annual increase in Mean C, FQI, and RIV _n ; <5% cover of invasive weeds; No areas > 0.5 square meters void of vegetation	5	3 years
Fen Wetlands	0.01	% Cover; Vegetation metrics	Vegetation data collection plots	90% Cover in 3 years; annual increase in Mean C, FQI, and RIV _n ; <5% cover of invasive weeds; No areas > 0.5 square meters void of vegetation	2	3 years
Shady Floodplain Plant Community	2.8 acres	% Cover; Vegetation metrics; Woody plant survival	Vegetation data collection plots; Surviving woody plant counts	85% Ground cover - Residential; 90% Ground cover - Government; 90% woody plant survival; No areas > 0.5 square meters void of vegetation (government only)	28	3 years
Upland Savanna Plant Community	0.5 acres	% Cover	Visual monitoring	100% Cover; No areas > 0.5 square meters void of vegetation	5	3 years

Notes:

1. Banks, pools and riffles are monitored in the spring.
2. Vegetation monitoring is performed in the summer.

ARCADIS

Figure

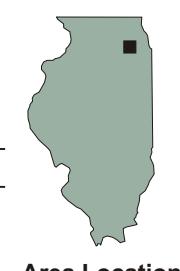


REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., NAPERVILLE, ILL., 1993.

2000' 0 2000'
Approximate Scale: 1" = 2000'

LEGEND:

- = Upstream Limit
- = Downstream Limit



Area Location

TRONOX LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER SITE AND
THE RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE
FINAL COMPLETION REPORT - REACH 5B

SITE LOCATION MAP

 ARCADIS

FIGURE
1-1

ARCADIS

Appendices

(Appendices A-G included on CD)

ARCADIS

Appendix A

Tronox Kress Creek File Index for
Project Documents

Kress Creek
File Index
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 1.0 General and Administrative
 - 1.1 General Correspondence
 - 1.2 Reports and Meeting Notes
 - 1.3 Legal
 - 1.3-1 Department of Justice
 - 1.3-2 NRD Issues
 - 1.3-3 Karagainus &White
 - 1.4 Government
 - 1.4-1 U. S. EPA
 - 1.4-1-1 Correspondence
 - 1.4-1-2 Consent Decree
 - 1.4-1-2-1 Administrative Order for RS/FS
 - 1.4-1-3 Unilateral Administration Order (UAO)
 - 1.4-1-4 Work Plan Review Comments
 - 1.4-1-5 Data Transmittal
 - 1.4-2 Previous Investigations
 - 1.4-2-1 1995 GPS Survey
 - 1.4-2-2 1993 GPS Survey
 - 1.4-3 City of West Chicago
 - 1.4-4 IEMA (formerly IDNS)**
 - 1.4-5 Illinois Dept. of Natural Resources
 - 1.4-6 DuPage County Dept. of Environmental Concerns
 - 1.4-7 Illinois Historic Preservation Agency
 - 1.4-8 DuPage County Forest Preserve (Research Permit)
 - 1.4-9 Corp. of Engineers
 - 1.4-10 Illinois Department of Transportation
 - 1.4-11 West Chicago Park District – Manville Oaks
 - 1.4-12 The Cenacle
 - 1.4-13 Department of the Army
 - 1.4-14 Permits

Kress Creek
File Index
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 1.4-15 Communities/Christopher B. Burke Engineering
 - 1.4-15-1 Correspondence
 - 1.4-15-2 Environmental Studies
- 1.4-16 City of Warrenville
- 1.4-17 Illinois Environmental Protection Agency (IEPA)
- 1.5 Daily/Weekly Activity Reports
- 1.6 Insurance
- 1.7 Utilities
 - 1.7-1 EJ & E Railroad
- 1.8 Health and Safety
 - 1.8-1 Accident Reports***
 - 1.8-2 Safety Meetings***
 - 1.8-3 Vehicle Inspections***
 - 1.8-4 Site Safety Tour/Inspections***
- 1.9 Personnel Records (Including original attendance sheets)
 - 1.9-1 Training Materials***
 - 1.9-2 Job Descriptions***
- 1.10 Public Relations
 - 1.10-1 Newspaper Articles
- 1.11 Site Administration (***Reference: Scope & Planning Docs.***)
- 1.12 Quality System
 - 1.12-1 Review Meetings***
 - 1.12-2 System Reviews/Audits***
 - 1.12-3 NCR's/CAR's (Logs)***
- 2.0 Accounting and Finance
 - 2.1 Cost Estimates
 - 2.1-1 Kerr-McGee
 - 2.1-2 Contractors
 - 2.2 AFE's
 - 2.3 Cost Accounting

Kress Creek
File Index
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 2.4 Taxes
- 2.5 Financial Audits
- 3.0 Engineering
 - 3.1 Work Plan and Specifications (Reference: Scoping and Planning Docs)
 - 3.1-1 Risk Assessment and Pre-Design Plan and Biweekly Meeting Notes
 - 3.1-2 Investigation Work Plan Documents
 - 3.1-3 Remedial Design Work Plan Documents
 - 3.1-4 Remedial Action Work Plan Documents
 - 3.2 Engineering Drawings (See 7.1 for Individual Property Plans)
 - 3.2-1 Engineering Calculations
 - 3.2.2 Cross Sections
 - 3.2.3 Verification Drawings
 - 3.2-3-1 Base of Excavation
 - 3.2-3-2 Overburden Removal
 - 3.2.4 Reports
 - 3.2.5 Characterization
 - 3.3 Contracts - Engineering
 - 3.3-1 West Central Environmental Consultants/ProSource (Correspondence)
 - 3.3-1-1 Bidder Qualification
 - 3.3-1-2 Bid Package (Including Response & Analysis)
 - 3.3-1-3 Contract & Amendments
 - 3.3-1-3-1 Work Change Request
 - 3.3-1-3-2 Progress Invoices
 - 3.3-1-4 Estimates & Forecasts
 - 3.3-1-5 Schedules
 - 3.3-1-6 Reports
 - 3.3-1-7 Characterization Report
 - 3.3-2 Weston, Inc. (Correspondence)
 - 3.3-2-1 Bidder Qualifications
 - 3.3-2-2 Bid Package (Including Response & Analysis)

**Kress Creek
File Index**
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 3.3-2-3 Contract & Amendments
 - 3.3-2-3-1 Work Change Request
 - 3.3-2-3-2 Progress Invoices
- 3.3-2-4 Estimates & Forecasts
- 3.3-2-5 Schedules
- 3.3-2-6 Reports
- 3.3-3 R. H. Anderson (Correspondence)
 - 3.3-3-1 Bidder Qualifications
 - 3.3-3-2 Bid Package (Including Response & Analysis)
 - 3.3-3-3 Contract & Amendments
 - 3.3-3-3-1 Work Change Request
 - 3.3-3-3-2 Progress Invoices
 - 3.3-3-4 Estimates & Forecasts
 - 3.3-3-5 Schedules
 - 3.3-3-6 Reports
- 3.3-4 Independent Testing Support - (Correspondence)
 - 3.3-4-1 TSC
 - 3.3-4-2 Hazen
 - 3.3-4-3 Lancaster
- 3.3-5 T.L. Rice Inc. (Correspondence)
 - 3.3-5-1 Bidder Qualification (Resume')
 - 3.3-5-3 Contracts and Amendments
 - 3.3-5-6 Reports
- 3.3-6 BBL Inc. (Correspondence)
 - 3.3-6-1 Bidder Qualifications
 - 3.3-6-2 Bid Package (Including Response and Analysis)
 - 3.3-6-3 Contract and Amendments
 - 3.3-6-3-1 Change Orders (Work Changes)
 - 3.3-6-3-2 Invoices
 - 3.3-6-4 Reach Specific Alternatives Evaluation Report (RSAE)

Kress Creek
File Index
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 3.3-6-4-1 Comments to RSAE Report
- 3.3-6-5 Conceptual Design Report
 - 3.3-6-5-1 Comments to Conceptual Design Report
 - 3.3-6-5-2 Reach 8 Addendum
- 3.3-6-6 Conceptual Restoration Plan
 - 3.3-6-6-1 Comments to Conceptual Restoration Plan
- 3.3-6-7 Reports
 - 3.3-6-7-1 Transportation Plan
 - 3.3-6-7-2 ARARS
- 3.3-6-8 Detailed Design
 - 3.3-6-8-1 Engineering Calculations
 - 3.3-6-8-2 Drawings
 - 3.3-6-8-3 FEQ Modeling
 - 3.3-6-8-4 Operation and Maintenance
- 3.3-6-9 RI/FS
 - 3.3-6-9-1 Remedial Investigation/Comments
 - 3.3-6-9-2 Feasibility Study
- 3.4 Previous Investigations (Pre-1997)
- 3.5 Field Investigation (1997 to current)
 - 3.5-1 Surface Gamma Survey
 - 3.5-1-1 Field Data
 - 3.5-1-2 Maps
 - 3.5-2 Shallow Soil Test Holes
 - 3.5-2-1 1997 Borehole Field Logs
 - 3.5-2-2 1998 Borehole Field Logs
 - 3.5-2-3 1999 Borehole Field Logs
 - 3.5-2-4 2000 Borehole Field Logs
 - 3.5-2-5 2001 Borehole Field Logs
 - 3.5-2-6 2002 Borehole Field Logs
 - 3.5-2-7 Soil Boring Log Sheets

Kress Creek

File Index

(Retention Period is lifetime per Kerr-McGee Legal Department)

- 3.5-2-8 Radiological Lab Data
 - 3.5-2-9 Land Surveying
 - 3.5-2-10 Field Maps
 - 3.5-2-11 Borehole Logging Master Spreadsheets & Checkprints
 - 3.5-2-12 Underwater Soil Sample (Hazen)
 - 3.5-2-13 Daily Summary
 - 3.5-3 Deep Soil Borings
 - 3.5-3-1 Soil Boring Logs
 - 3.5-3-2 Downhole Gamma Logging
 - 3.5-3-3 Geotechnical Soil Testing
 - 3.5-3-4 Radiological Lab Data
 - 3.5-3-5 Land Surveying
 - 3.5-3-6 Field Maps
 - 3.5-4 Piezometers/Staff Gauges/Stream Flow/Surface Water
 - 3.5-4-1 Soil Boring Logs
 - 3.5-4-2 Borehole Field Logs
 - 3.5-4-3 Radiological Lab Data
 - 3.5-4-4 Land Surveying
 - 3.5-4-5 Water Level Field Data
 - 3.5-4-6 Stream Flow Calculations
 - 3.5-4-7 Field Maps
 - 3.5-4-8 Chain of Custody
 - 3.5-4-9 Water Analysis (Manville OAKS Park Pond)
 - 3.5-4-10 Sediment Sampling
 - 3.5-5 Field Log Books
 - 3.5-6 Aerial Photos
 - 3.5-7 Weston Tree Study
 - 3.5-8 Weston Wetlands Maps for West Branch DuPage River
- 3.6 Data Output ARCHIVE - Including all extensions thru 3.6-3
- 4.0 Construction

Kress Creek
File Index
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 4.1 BBL (Correspondence)
 - 4.1-1 Bidder Qualification (See 3.3-6-1)
 - 4.1-2 Bid Package (See 3.3-6-2)
 - 4.1-3 Contracts & Amendments
 - 4.1-3-1 Change Orders (Work Changes)
 - 4.1-3-2 Invoices
 - 4.1-3-3 Submittals
 - 4.1-4 Schedules
 - 4.1-5 Reports
 - 4.1-5-1 Manpower Estimate & Forecast
 - 4.1-5-2 QC Field Reports
 - 4.1-5-3 Safety/Incident Reports
 - 4.1-5-4 Turnover Documents
 - 4.1-6 Verification Data
 - 4.1-6-1** *Verf., Maps, and Data (Bottom of OB and BP)*
 - 4.1-6-2** *Field Logbooks*
 - 4.1-6-3** *Calibration Records (Raw Data GPS)*
 - 4.1-7 Maintenance Inspection Reports
- 4.2 Miscellaneous Contracts (RD-n-P Drilling)
- 5.0 Procurement - Purchase Orders (Filed numerically with approval documents, bid evaluation, receiving reports, specs, etc)
 - 5.1 Contractor Procurement and Meetings
 - 5.1-1 Property or Equipment Loss - Inventory
 - 5.2 Kerr-McGee Procurement
 - 5.3 Vendor List
- 6.0 Health Physics
 - 6.1 Air Monitoring
 - 6.2 Survey Data
 - 6.2-1 Backfill Sample Analysis – Report (Sources)
 - 6.3 Instrument/Equipment Calibrations and Quality Assurance (H.P. 17.0000)
 - 6.4 Respiratory Protection Program Maintenance

Kress Creek
File Index
(Retention Period is lifetime per Kerr-McGee Legal Department)

- 6.5 Dosimetry Monitoring Data
- 6.6 Safe Work Permits
- 6.7 Downhole and Gamma Logging
 - 6.7-1 Bridges - Westwind Division
- 6.8 Water Survey
- 6.9 Training
- 7.0 Property Completions
 - 7.1 Work Orders
 - 7.1-1 Parcel Folders (access agreements, photographs, etc.)
 - 7.2 Access Agreements
 - 7.3 Bills of Lading
 - 7.4 Materials Handled (Overburden Verification)
 - 7.5 Invoices
 - 7.6 Radiological Sampling and Data Verifications (Soil Samples)
 - 7.6-1 Excavation Depth Verifications
 - 7.7 Notifications / Verification Release from U.S. EPA
 - 7.8 Acceptance from City of West Chicago
 - 7.9 Property Video Survey
- 8.0 Closure Report

Appendix B

Summary Table of "GPS Points Achieved" Issued for the Bottoms of Overburden and Targeted Materials for Reach 5B

Appendix B
**Summary Table of “GPS Points Achieved” Issued for the Bottoms of Overburden and
 Targeted Material for Reach 5B**

**Final Completion Report – Reach 5B for the Kress Creek/West Branch DuPage River Site and
 the River Portion of the Sewage Treatment Plant Site
 Tronox LLC – DuPage County, Illinois**

Reach Area	Points Achieved Date	Package Delivery Date and Method
R5B-1	08/07-08/06	08/09/06 via e-mail
R5B-1	08/11/06	08/11/06 via e-mail
R5B-3	08/14/06	08/15/06 via e-mail
R5B-2, R5B-8, R5B-11	08/15-16/06	08/18/06 via e-mail
R5B-3	08/21/06	08/22/06 via e-mail
R5B-3	08/22/06	08/23/06 via e-mail
R5B-1, R5B-3, R5B-8	08/23/06	08/24/06 via e-mail
R5B-1, R5B-2, R5B-8	08/24/06, 08/28/06	08/30/06 via e-mail
R5B-1, R5B-2, R5B-4, R5B-5	08/29-30/06	08/31/06 via e-mail
R5B-1, R5B-4, R5B-5, R5B-6, R5B-8, R5B-10, R5B-11	08/31/06	09/01/06 via e-mail
R5B-6, R5B-7, R5B-8, R5B-10, R5B-11	09/01/06	09/05/06 via e-mail
R5B-6, R5B-7, R5B-9, R5B-10, R5B-12	09/07/06	09/08/06 via e-mail
R5B-9, R5B-12	09/08-09/06	09/13/06 via e-mail

Notes:

Distribution Initiator:

Michael Savage, ARCADIS BBLES

Distribution List:

Mark Krippel, Tronox
 Michael Logan, Tronox
 Frank Schultz, Tronox
 Jeffery Williams, Tronox
 Rebecca Frey, USEPA
 Richard Allen, IEMA
 Kelly Grahn, IEMA
 Steve Shafer, REM
 Pat Kelsey, CBB West
 Kristine Meyer, CBB West
 Matt Scheffler, CBB West
 John Wills, CBB West
 Mark Gravelding, ARCADIS BBL
 Joseph Molina, ARCADIS BBLES
 Heather VanDewalker, ARCADIS BBL
 Mike Crystal, Sevenson
 Rick Elia, Jr., Sevenson
 Mark Schmitt, Sevenson
 Wade Carlson, Prosource
 Jerry Krane, ProSource
 Jeff Walker

Appendix C

Notification of Successful GPS
Verification Survey for the Bottoms of
Overburden, Reach 5B – All Sections
(R5B-1 through R5B-12)

Transmitted Via Hand Delivery/ E-Mail

KC 091

November 2, 2006

*M SK
11-2-06*

Mr. Mark Krippel
Tronox LLC
800 Weyrauch Street
West Chicago, IL 60185

Re: Notification of Successful GPS Verification Survey
For the Bottom of Overburden
Reach 5B – All Sections
Remedial Action at the Kress Creek/West Branch DuPage River Project, West Chicago, IL
BBLES Project #: 71020.001

Dear Mark:

In accordance with Section 2.1.5.2 “Notification” in the Reach 5B Final Design/Remedial Action (FD/RA) Work Plan for the above referenced project, BBL Environmental Services, Inc. (BBLES) is pleased to notify Tronox LLC, the USEPA RPM/OSC and the Local Communities’ Representative that a successful GPS Verification Survey was performed for the Bottom of Overburden for the excavations for the entirety of Reach 5B at the Kress Creek/West Branch DuPage River Remedial Action Project in West Chicago (DuPage County), Illinois at the time and date noted below:

1. This GPS Verification Survey Package issued on November 2, 2006 includes in its entirety the Reach 5B overburden points achieved and documented in accordance with the Work Plan. These GPS verification points for bottom of overburden in Reach 5B were previously distributed by a series of e-mails entitled “Kress Creek/West Branch, Reach 5B: GPS points achieved” from July 19, 2006 through September 13, 2006.

There was a single drillhole, Verification Point R5b-9-7957t in Section 9 in Reach 5B, in which the point was surveyed to verify that the excavation of overburden to within the work plan tolerance was achieved, but that survey information was not stored and recorded in the GPS survey equipment. That incident was addressed in Corrective/Preventative Action Request No. WB-2006-01 and the specified corrective actions were taken immediately to prevent that situation from reoccurring.

GPS Verification Survey – Bottom of Overburden
Reach 5B Completed
November 2, 2006
Page 2 of 3

Excavation Locations: Reach 5B: Sections R5B-1 through R5B-12.

Date of Verification: November 2, 2006
Time of Verification: 4:00 PM CST

In accordance with Section 2.1.5.1 "Concurrent Verification" of the Reach 5B FD/RA Work Plan, BBLES sent an e-mail each Friday with a weekly schedule for the following week that listed the projected locations and dates where excavations and GPS verification surveys would be performed. BBLES sent those weekly schedule e-mails to Rebecca Frey and Scott Hansen of USEPA, Richard Allen, Kelly Grahn and Steve Shafer of IEMA/DNS and John Wills of CBB West providing them the required 24 hour notice that the excavations and GPS verification surveys for the bottom of overburden material in the above listed areas would be completed during those weeks.

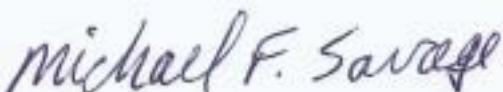
The attached Excel file prepared by ProSource Technologies, Inc. (ProSource) includes a separate table entitled "Kress Creek/ West Branch DuPage River Verification Points, Bottom of Overburden" for each of the 12 sections that comprise Reach 5B, and the tables list the design, actual and difference of the survey coordinates and elevations of the verification points in each section.

The attached "PDF" file prepared by ProSource includes seven (7) separate pdf figures numbered 1 of 7, 2 of 7, etc., and the figures are numbered from north to south. The figures present collectively a map of the excavation locations of the twelve sections that comprise Reach 5B, and denote the location of each of the verification points that have been verified.

The verification points listed in these attachments have been achieved and excavation of the targeted material in the specified excavation locations has proceeded in accordance with the prior preliminary verbal approval of these points based on the field monitoring of the regulators' representatives. Documents pertaining to this survey are available for inspection at the BBLES/Sevenson construction office at Tronox's REF Facility.

Sincerely,

BBL ENVIRONMENTAL SERVICES, INC.



Michael F. Savage, P.E.
Senior Engineer II

MFS/mfs

Enclosures

cc: Michael Logan, Tronox
Frank Schultz, Tronox
Jeffery Williams, Tronox

C:\Documents and Settings\mfs\My Documents\Kerr-McGee Kress Creek\Reach 5C & 5D\GPS verification survey packages\Reach 5B, Bottom of overburden, 11-02-06.doc
K-M File # KC 4.1-6-1

BBL ENVIRONMENTAL SERVICES, INC.
an ARCADIS company

Rebecca Frey, USEPA
Scott Hansen, USEPA
Richard Allen, IEMA
Kelly Grahn, IEMA
Steve Shafer, REM/IEMA
Pat Kelsey, CBB West
Kristine Meyer, CBB West
Matt Scheffler, CBB West
John Wills, CBB West
Mark Gravelding, BBLES
David Jedlicka, BBLES
Joseph Molina, BBLES
Heather Vandewalker, BBLES
Jeff Walker, BBLES
Michael Crystal, Sevenson
Rick Elia, Jr., Sevenson
Ricky Moss, Sevenson
Mark Schmitt, Sevenson
Wade Carlson, ProSource
Jerry Krane, ProSource

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Overburden
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-1-9058t	1021917.300	1890491.800	699.1	1021917.261	1890491.819	699.421	-0.039	0.019	0.321		
5	R5b-1-9062t	1021937.400	1890497.100	699.6	1021937.503	1890497.084	699.517	0.103	-0.016	-0.083		
5	R5b-1-9063t	1021937.700	1890513.600	699.7	1021937.734	1890513.674	699.965	0.034	0.074	0.265		
5	R5b-1-9065t	1021966.500	1890508.900	GS	1021966.497	1890508.882	700.565	-0.003	-0.018	NA		
5	R5b-1-9067t	1021966.600	1890493.200	700.0	1021966.613	1890493.183	699.900	0.013	-0.017	-0.100		
5	R5b-1-9068t	1021917.300	1890507.800	699.4	1021917.282	1890507.771	699.580	-0.018	-0.029	0.180		
5	R5b-1-9070t	1021907.600	1890505.000	GS	1021907.619	1890505.063	699.900	0.019	0.063	NA		
5	R5b-1-9076t	1022043.400	1890535.100	GS	1022043.381	1890535.006	701.058	-0.019	-0.094	NA		
5	R5b-1-9078t	1022093.900	1890619.900	GS	1022093.906	1890619.961	699.021	0.006	0.061	NA		
5	R5b-1-9080t	1022078.800	1890590.500	700.5	1022078.816	1890590.426	700.806	0.016	-0.074	0.306		
5	R5b-1-9082t	1022063.700	1890561.000	GS	1022063.616	1890560.974	701.232	-0.084	-0.026	NA		
5	R5b-1-9083t	1021967.200	1890523.900	699.5	1021967.263	1890523.948	699.700	0.063	0.048	0.200		
5	R5b-1-9086t	1022018.000	1890516.000	700.2	1022017.923	1890516.018	700.510	-0.077	0.018	0.310		
5	R5b-1-9087t	1022017.100	1890531.400	699.9	1022017.140	1890531.421	700.289	0.040	0.021	0.389		
5	R5b-1-9089t	1021992.800	1890496.100	700.2	1021992.834	1890496.018	700.579	0.034	-0.082	0.379		
5	R5b-1-9090t	1021992.700	1890511.500	GS	1021992.681	1890511.462	700.771	-0.019	-0.038	NA		
5	R5b-1-9129t	1022189.800	1890747.900	GS	1022189.772	1890747.844	701.399	-0.028	-0.056	NA		
5	R5b-1-9136t	1022101.500	1890652.300	699.7	1022101.440	1890652.338	699.884	-0.060	0.038	0.184		
5	R5b-1-9138t	1022115.500	1890644.100	GS	1022115.571	1890644.153	700.543	0.071	0.053	NA		
5	R5b-1-9144t	1022209.500	1890772.600	700.9	1022209.527	1890772.686	701.242	0.027	0.086	0.342		
5	R5b-1-9148t	1022202.700	1890757.000	700.3	1022202.695	1890756.935	699.633	-0.005	-0.065	-0.667	Point was surveyed at existing ground surface	
5	R5b-1-9150t	1022124.800	1890675.900	700.3	1022124.860	1890675.892	700.420	0.060	-0.008	0.120		
5	R5b-1-9158t	1022169.100	1890723.600	700.8	1022169.073	1890723.571	700.924	-0.027	-0.029	0.124		
5	R5b-1-9159t	1022152.400	1890696.600	GS	1022152.395	1890696.622	701.539	-0.005	0.022	NA		
5	R5b-1-9188t	1022137.700	1890703.900	700.4	1022137.823	1890703.926	700.436	0.123	0.026	0.036		
5	R5b-1-9211t	1022146.900	1890682.700	700.3	1022146.836	1890682.719	700.538	-0.064	0.019	0.238		
5	R5b-1-9215t	1022114.200	1890704.000	700.6	1022114.145	1890703.919	700.863	-0.055	-0.081	0.263		
5	R5b-1-9216t	1022119.900	1890698.500	700.7	1022119.883	1890698.553	700.758	-0.017	0.053	0.058		
5	R5b-1-9217t	1022132.000	1890690.900	700.3	1022131.927	1890690.878	700.721	-0.073	-0.022	0.421		
5	R5b-1-9223t	1022116.000	1890661.800	700.1	1022115.956	1890661.743	700.294	-0.044	-0.057	0.194		
5	R5b-1-9224t	1022086.800	1890625.300	GS	1022086.797	1890625.343	700.857	-0.003	0.043	NA		
5	R5b-1-9225t	1022103.200	1890634.400	699.8	1022103.180	1890634.406	699.844	-0.020	0.006	0.044		
5	R5b-1-9227t	1022094.800	1890656.400	700.0	1022094.813	1890656.441	700.485	0.013	0.041	0.485		
5	R5b-1-9228t	1022129.400	1890653.300	700.2	1022129.393	1890653.333	700.296	-0.007	0.033	0.096		
5	R5b-1-9230t	1022088.800	1890642.200	699.9	1022088.764	1890642.310	700.021	-0.036	0.110	0.121		
5	R5b-1-9231t	1022109.300	1890666.400	699.9	1022109.379	1890666.412	700.122	0.079	0.012	0.222		
5	R5b-1-9232t	1022115.300	1890692.400	699.1	1022115.299	1890692.468	699.296	-0.001	0.068	0.196		

△ Elevation > 0.5 ft Blue

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△ Easting/Northing < or = 0.2 ft Green

△ Easting/Northing > 0.2 ft Blue

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-1-9233t	1022134.900	1890660.000	700.1	1022134.862	1890659.935	699.669	-0.038	-0.065	-0.431	Point was surveyed at existing ground surface
5	R5b-1-9235t	1022132.800	1890671.200	700.3	1022132.825	1890671.240	700.557	0.025	0.040	0.257	
5	R5b-1-9237t	1022118.200	1890680.300	700.4	1022118.208	1890680.308	700.651	0.008	0.008	0.251	
5	R5b-1-9270t	1022152.700	1890713.300	700.6	1022152.682	1890713.318	700.794	-0.018	0.018	0.194	
5	R5b-1-9272t	1022175.900	1890738.400	GS	1022175.853	1890738.424	701.360	-0.047	0.024	NA	
5	R5b-1-9283t	1022160.800	1890709.800	GS	1022160.744	1890709.830	700.525	-0.056	0.030	NA	
5	R5b-1-9284t	1022143.700	1890711.000	700.4	1022143.645	1890710.965	700.588	-0.055	-0.035	0.188	
5	R5b-1-9285t	1022157.400	1890721.300	700.8	1022157.498	1890721.292	700.765	0.098	-0.008	-0.035	
5	R5b-1-9299t	1022004.000	1890507.200	700.5	1022004.040	1890507.149	700.366	0.040	-0.051	-0.134	
5	R5b-1-9300t	1022005.100	1890523.200	699.9	1022005.149	1890523.180	699.898	0.049	-0.020	-0.002	
5	R5b-1-9328t	1022105.800	1890631.000	GS	1022105.726	1890630.965	698.376	-0.074	-0.035	NA	
5	R5b-1-9333t	1022112.000	1890635.000	GS	1022111.945	1890634.994	698.412	-0.055	-0.006	NA	
5	R5b-1-9336t	1022092.200	1890648.000	700.0	1022092.124	1890647.954	700.209	-0.076	-0.046	0.209	
5	R5b-1-9362t	1022055.100	1890547.200	700.9	1022055.088	1890547.316	701.323	-0.012	0.116	0.423	
5	R5b-1-9374t	1022086.100	1890605.100	700.0	1022086.025	1890605.126	699.183	-0.075	0.026	-0.817	Point was surveyed at existing ground surface
5	R5b-1-9381t	1022072.000	1890574.900	700.7	1022071.982	1890574.902	700.937	-0.018	0.002	0.237	
5	R5b-1-9385t	1021953.900	1890502.500	GS	1021953.812	1890502.440	700.487	-0.088	-0.060	NA	
5	R5b-1-9386t	1021993.600	1890492.500	GS	1021993.628	1890492.586	698.212	0.028	0.086	NA	
5	R5b-1-9389t	1021980.800	1890517.300	699.9	1021980.776	1890517.290	700.340	-0.024	-0.010	0.440	
5	R5b-1-9390t	1021980.600	1890501.300	GS	1021980.529	1890501.271	700.953	-0.071	-0.029	NA	
5	R5b-1-9391t	1021986.400	1890488.400	700.0	1021986.431	1890488.421	699.723	0.031	0.021	-0.277	Point was surveyed at existing ground surface
5	R5b-1-9393t	1021992.000	1890520.100	700.0	1021992.043	1890520.025	700.483	0.043	-0.075	0.483	
5	R5b-1-9394t	1021980.300	1890485.100	698.5	1021980.234	1890485.077	698.818	-0.066	-0.023	0.318	
5	R5b-1-9397t	1022006.500	1890504.400	GS	1022006.501	1890504.376	699.175	0.001	-0.024	NA	
5	R5b-1-9400t	1022030.600	1890525.200	700.3	1022030.544	1890525.122	700.084	-0.056	-0.078	-0.216	
5	R5b-1-9403t	1021917.200	1890516.400	GS	1021917.131	1890516.403	700.621	-0.069	0.003	NA	
5	R5b-1-9405t	1021938.100	1890521.400	699.7	1021938.178	1890521.436	700.043	0.078	0.036	0.343	
5	R5b-1-9406t	1021936.500	1890489.600	GS	1021936.496	1890489.526	700.473	-0.004	-0.074	NA	
5	R5b-1-9410t	1021906.700	1890511.500	GS	1021906.629	1890511.588	699.851	-0.071	0.088	NA	
5	R5b-1-9412t	1021954.800	1890518.000	699.7	1021954.881	1890517.970	700.158	0.081	-0.030	0.458	
5	R5b-1-9414t	1021966.800	1890485.900	698.4	1021966.787	1890485.889	698.769	-0.013	-0.011	0.369	
5	R5b-1-9416t	1021974.500	1890524.900	699.7	1021974.430	1890524.843	699.635	-0.070	-0.057	-0.065	
5	R5b-1-9417t	1021952.500	1890485.900	698.9	1021952.559	1890485.861	698.927	0.059	-0.039	0.027	
5	R5b-1-9464t	1021926.400	1890508.000	GS	1021926.404	1890508.071	699.858	0.004	0.071	NA	
5	R5b-1-9468t	1021899.400	1890511.000	GS	1021899.353	1890510.953	699.718	-0.047	-0.047	NA	
5	R5b-1-9470t	1021911.900	1890517.700	699.2	1021911.949	1890517.750	699.018	0.049	0.050	-0.182	
5	R5b-1-9487t	1021924.900	1890492.000	GS	1021924.832	1890492.023	700.121	-0.068	0.023	NA	

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Overburden
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-1-9489t	1021927.300	1890516.900	699.5	1021927.283	1890516.958	699.974	-0.017	0.058	0.474		
5	R5b-1-9492t	1021923.600	1890484.700	GS	1021923.679	1890484.667	698.563	0.079	-0.033	NA		
5	R5b-1-9494t	1021919.800	1890488.100	GS	1021919.728	1890488.041	698.929	-0.072	-0.059	NA		
5	R5b-1-9495t	1021930.800	1890483.000	697.7	1021930.716	1890483.050	697.882	-0.084	0.050	0.182		
5	R5b-1-T1	1022210.700	1890776.700	700.9	1022210.624	1890776.637	701.328	-0.076	-0.063	0.428		
5	R5b-1-T10	1022165.200	1890726.500	700.8	1022165.096	1890726.528	700.869	-0.104	0.028	0.069		
5	R5b-1-T11	1022155.400	1890723.600	700.8	1022155.421	1890723.579	701.194	0.021	-0.021	0.394		
5	R5b-1-T12	1022170.400	1890723.200	700.8	1022170.420	1890723.125	699.243	0.020	-0.075	-1.557	Point was surveyed at existing ground surface	
5	R5b-1-T13	1022150.600	1890715.700	700.6	1022150.580	1890715.714	700.862	-0.020	0.014	0.262		
5	R5b-1-T14	1022140.200	1890714.000	700.4	1022140.272	1890714.050	700.727	0.072	0.050	0.327		
5	R5b-1-T15	1022161.800	1890709.000	GS	1022161.831	1890708.916	699.114	0.031	-0.084	NA		
5	R5b-1-T16	1022116.000	1890706.600	700.6	1022116.007	1890706.516	700.992	0.007	-0.084	0.392		
5	R5b-1-T17	1022134.300	1890706.100	700.4	1022134.273	1890706.173	700.574	-0.027	0.073	0.174		
5	R5b-1-T18	1022111.100	1890705.700	700.6	1022111.133	1890705.717	700.785	0.033	0.017	0.185		
5	R5b-1-T19	1022122.200	1890701.700	700.7	1022122.146	1890701.753	700.819	-0.054	0.053	0.119		
5	R5b-1-T2	1022205.700	1890774.700	700.9	1022205.720	1890774.754	701.378	0.020	0.054	0.478		
5	R5b-1-T20	1022154.800	1890695.900	GS	1022154.748	1890695.827	698.802	-0.052	-0.073	NA		
5	R5b-1-T21	1022112.100	1890694.800	699.1	1022112.150	1890694.866	699.250	0.050	0.066	0.150		
5	R5b-1-T22	1022114.700	1890682.700	700.4	1022114.753	1890682.677	700.822	0.053	-0.023	0.422		
5	R5b-1-T23	1022149.600	1890682.300	700.3	1022149.574	1890682.298	698.638	-0.026	-0.002	-1.662	Point was surveyed at existing ground surface	
5	R5b-1-T24	1022135.800	1890669.200	700.3	1022135.901	1890669.200	700.454	0.101	0.000	0.154		
5	R5b-1-T25	1022105.800	1890668.200	699.9	1022105.889	1890668.163	700.283	0.089	-0.037	0.383		
5	R5b-1-T26	1022108.700	1890662.300	699.9	1022108.607	1890662.310	700.043	-0.093	0.010	0.143		
5	R5b-1-T27	1022098.100	1890659.600	700.0	1022098.095	1890659.530	700.421	-0.005	-0.070	0.421		
5	R5b-1-T28	1022137.000	1890658.500	700.1	1022136.971	1890658.539	698.727	-0.029	0.039	-1.373	Point was surveyed at existing ground surface	
5	R5b-1-T29	1022090.900	1890658.300	700.0	1022090.854	1890658.228	700.477	-0.046	-0.072	0.477		
5	R5b-1-T3	1022210.700	1890770.700	700.9	1022210.673	1890770.645	699.894	-0.027	-0.055	-1.006	Point was surveyed at existing ground surface	
5	R5b-1-T30	1022101.500	1890657.600	699.7	1022101.513	1890657.638	700.192	0.013	0.038	0.492		
5	R5b-1-T31	1022131.400	1890652.000	700.2	1022131.394	1890652.054	698.564	-0.006	0.054	-1.636	Point was surveyed at existing ground surface	
5	R5b-1-T32	1022088.100	1890650.600	700.0	1022088.104	1890650.570	700.340	0.004	-0.030	0.340		
5	R5b-1-T33	1022085.100	1890644.800	699.9	1022085.117	1890644.827	700.047	0.017	0.027	0.147		
5	R5b-1-T34	1022117.300	1890643.000	GS	1022117.278	1890643.051	698.644	-0.022	0.051	NA		
5	R5b-1-T35	1022114.300	1890632.500	GS	1022114.270	1890632.507	698.028	-0.030	0.007	NA		
5	R5b-1-T36	1022101.600	1890629.800	GS	1022101.550	1890629.843	698.747	-0.050	0.043	NA		
5	R5b-1-T37	1022108.600	1890628.700	GS	1022108.644	1890628.700	698.397	0.044	0.000	NA		
5	R5b-1-T38	1022083.400	1890627.000	GS	1022083.383	1890627.020	700.928	-0.017	0.020	NA		
5	R5b-1-T39	1022093.300	1890625.200	GS	1022093.255	1890625.242	700.630	-0.045	0.042	NA		

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-1-T4	1022198.600	1890760.000	700.3	1022198.583	1890760.052	701.792	-0.017	0.052	1.492	Trinox directed to take as TM due to stump
5	R5b-1-T40	1022096.900	1890622.500	GS	1022096.963	1890622.438	698.848	0.063	-0.062	NA	
5	R5b-1-T41	1022084.300	1890621.400	GS	1022084.260	1890621.407	700.954	-0.040	0.007	NA	
5	R5b-1-T42	1022094.900	1890619.300	GS	1022094.838	1890619.276	699.087	-0.062	-0.024	NA	
5	R5b-1-T43	1022087.900	1890618.700	GS	1022087.944	1890618.678	700.815	0.044	-0.022	NA	
5	R5b-1-T44	1022082.500	1890607.200	700.0	1022082.598	1890607.218	700.337	0.098	0.018	0.337	
5	R5b-1-T45	1022087.300	1890604.700	700.0	1022087.254	1890604.623	698.771	-0.046	-0.077	-1.229	Point was surveyed at existing ground surface
5	R5b-1-T46	1022075.500	1890592.500	700.5	1022075.532	1890592.548	700.757	0.032	0.048	0.257	
5	R5b-1-T47	1022080.100	1890589.900	700.5	1022080.188	1890589.939	699.376	0.088	0.039	-1.124	Point was surveyed at existing ground surface
5	R5b-1-T48	1022069.300	1890576.700	700.7	1022069.308	1890576.763	701.120	0.008	0.063	0.420	
5	R5b-1-T49	1022074.400	1890573.700	700.7	1022074.456	1890573.676	699.053	0.056	-0.024	-1.647	Point was surveyed at existing ground surface
5	R5b-1-T5	1022203.900	1890756.100	700.3	1022203.953	1890756.106	699.512	0.053	0.006	-0.788	Point was surveyed at existing ground surface
5	R5b-1-T50	1022061.100	1890563.400	GS	1022061.047	1890563.401	701.618	-0.053	0.001	NA	
5	R5b-1-T51	1022065.500	1890559.900	GS	1022065.513	1890559.935	699.335	0.013	0.035	NA	
5	R5b-1-T52	1022051.800	1890549.600	700.9	1022051.761	1890549.729	701.102	-0.039	0.129	0.202	
5	R5b-1-T53	1022058.100	1890545.900	700.9	1022058.089	1890545.904	698.906	-0.011	0.004	-1.994	Point was surveyed at existing ground surface
5	R5b-1-T54	1022038.800	1890538.100	GS	1022038.827	1890538.009	701.190	0.027	-0.091	NA	
5	R5b-1-T55	1022017.400	1890535.300	699.9	1022017.510	1890535.200	700.128	0.110	-0.100	0.228	
5	R5b-1-T56	1022044.300	1890534.900	GS	1022044.334	1890534.793	700.750	0.034	-0.107	NA	
5	R5b-1-T57	1022027.000	1890531.500	700.3	1022027.115	1890531.494	700.137	0.115	-0.006	-0.163	
5	R5b-1-T58	1021974.300	1890529.000	699.7	1021974.254	1890528.989	699.939	-0.046	-0.011	0.239	
5	R5b-1-T59	1022008.300	1890527.600	699.9	1022008.287	1890527.594	700.300	-0.013	-0.006	0.400	
5	R5b-1-T6	1022185.900	1890750.900	GS	1022185.905	1890750.874	701.357	0.005	-0.026	NA	
5	R5b-1-T60	1021967.400	1890527.500	699.5	1021967.424	1890527.451	699.967	0.024	-0.049	0.467	
5	R5b-1-T61	1021938.400	1890525.800	699.7	1021938.438	1890525.797	699.979	0.038	-0.003	0.279	
5	R5b-1-T62	1022031.500	1890524.600	700.3	1022031.443	1890524.526	700.426	-0.057	-0.074	0.126	
5	R5b-1-T63	1021992.300	1890524.000	700.0	1021992.341	1890523.918	700.267	0.041	-0.082	0.267	
5	R5b-1-T64	1021912.000	1890522.800	699.2	1021912.117	1890522.801	699.339	0.117	0.001	0.139	
5	R5b-1-T65	1021954.400	1890522.300	699.7	1021954.432	1890522.310	700.111	0.032	0.010	0.411	
5	R5b-1-T66	1021981.000	1890521.600	699.9	1021981.026	1890521.660	700.122	0.026	0.060	0.222	
5	R5b-1-T67	1021927.900	1890520.900	699.5	1021927.858	1890520.837	699.873	-0.042	-0.063	0.373	
5	R5b-1-T68	1021917.200	1890520.100	GS	1021917.182	1890520.114	700.540	-0.018	0.014	NA	
5	R5b-1-T69	1021906.100	1890516.100	GS	1021906.052	1890516.064	699.799	-0.048	-0.036	NA	
5	R5b-1-T7	1022190.900	1890747.300	GS	1022190.899	1890747.213	701.145	-0.001	-0.087	NA	
5	R5b-1-T70	1022018.400	1890514.600	700.2	1022018.378	1890514.573	700.433	-0.022	-0.027	0.233	
5	R5b-1-T71	1021896.900	1890512.700	GS	1021896.902	1890512.780	698.751	0.002	0.080	NA	
5	R5b-1-T72	1021898.800	1890510.000	GS	1021898.787	1890510.046	699.319	-0.013	0.046	NA	

Δ Elevation > 0.5 ft Blue

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-1-T73	1022008.700	1890508.300	GS	1022008.710	1890508.354	700.141	0.010	0.054	NA		
5	R5b-1-T74	1021906.700	1890504.000	GS	1021906.757	1890503.997	699.698	0.057	-0.003	NA		
5	R5b-1-T75	1022000.100	1890499.500	GS	1022000.152	1890499.565	698.730	0.052	0.065	NA		
5	R5b-1-T76	1022009.400	1890499.300	GS	1022009.449	1890499.261	698.493	0.049	-0.039	NA		
5	R5b-1-T77	1021993.200	1890495.300	700.2	1021993.128	1890495.225	699.972	-0.072	-0.075	-0.228		
5	R5b-1-T78	1021993.600	1890493.500	GS	1021993.621	1890493.497	698.456	0.021	-0.003	NA		
5	R5b-1-T79	1021916.500	1890491.100	699.1	1021916.532	1890491.074	698.627	0.032	-0.026	-0.473	Point was surveyed at existing ground surface	
5	R5b-1-T8	1022172.400	1890741.100	GS	1022172.479	1890741.080	701.401	0.079	-0.020	NA		
5	R5b-1-T80	1021996.200	1890489.200	GS	1021996.128	1890489.233	698.248	-0.072	0.033	NA		
5	R5b-1-T81	1021986.700	1890487.300	700.0	1021986.636	1890487.262	698.485	-0.064	-0.038	-1.515	Point was surveyed at existing ground surface	
5	R5b-1-T82	1021937.000	1890485.900	GS	1021937.016	1890485.789	700.166	0.016	-0.111	NA		
5	R5b-1-T83	1021918.900	1890485.500	GS	1021918.814	1890485.437	698.758	-0.086	-0.063	NA		
5	R5b-1-T84	1021981.300	1890484.300	698.5	1021981.386	1890484.261	698.723	0.086	-0.039	0.223		
5	R5b-1-T85	1021951.600	1890482.400	698.9	1021951.659	1890482.311	699.124	0.059	-0.089	0.224		
5	R5b-1-T86	1021966.400	1890481.600	698.4	1021966.442	1890481.670	698.649	0.042	0.070	0.249		
5	R5b-1-T87	1021923.300	1890480.600	GS	1021923.270	1890480.649	698.840	-0.030	0.049	NA		
5	R5b-1-T88	1021931.000	1890479.900	697.7	1021930.998	1890480.027	697.790	-0.002	0.127	0.090		
5	R5b-1-T9	1022176.900	1890737.300	GS	1022176.832	1890737.284	700.501	-0.068	-0.016	NA		

△ Elevation > 0.5 ft Blue
 △ Elevation 0.5 to -0.25 ft Green
 △ Elevation < -0.25 ft Red

△ Easting/Northing < or = 0.2 ft Green
 △ Easting/Northing > 0.2 ft Blue

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-2

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-2-8859t	1021689.100	1890119.200	698.3	1021689.149	1890119.264	698.396	0.049	0.064	0.096			
5	R5b-2-8866t	1021696.300	1890103.600	698.0	1021696.363	1890103.581	698.371	0.063	-0.019	0.371			
5	R5b-2-8884t	1021703.400	1890146.900	GS	1021703.497	1890146.929	699.923	0.097	0.029	NA			
5	R5b-2-8895t	1021689.000	1890111.800	699.1	1021688.893	1890111.832	699.358	-0.107	0.032	0.258			
5	R5b-2-8898t	1021689.000	1890125.900	GS	1021689.040	1890125.998	699.719	0.040	0.098	NA			
5	R5b-2-8899t	1021698.200	1890118.300	GS	1021698.145	1890118.295	699.205	-0.055	-0.005	NA			
5	R5b-2-8900t	1021688.100	1890151.000	698.8	1021688.093	1890150.981	699.278	-0.007	-0.019	0.478			
5	R5b-2-8902t	1021703.800	1890123.100	698.7	1021703.832	1890123.188	699.092	0.032	0.088	0.392			
5	R5b-2-8903t	1021689.300	1890134.900	699.0	1021689.239	1890134.887	699.198	-0.061	-0.013	0.198			
5	R5b-2-8904t	1021685.100	1890134.800	GS	1021684.996	1890134.892	698.293	-0.104	0.092	NA			
5	R5b-2-8907t	1021704.900	1890130.400	699.0	1021704.887	1890130.296	699.160	-0.013	-0.104	0.160			
5	R5b-2-8932t	1021697.900	1890177.200	699.7	1021697.914	1890177.178	699.746	0.014	-0.022	0.046			
5	R5b-2-8937t	1021709.200	1890190.800	699.9	1021709.272	1890190.773	700.314	0.072	-0.027	0.414			
5	R5b-2-8939t	1021713.600	1890171.700	698.9	1021713.619	1890171.628	699.066	0.019	-0.072	0.166			
5	R5b-2-8945t	1021701.900	1890193.600	699.9	1021701.987	1890193.658	699.833	0.087	0.058	-0.067			
5	R5b-2-8947t	1021694.000	1890196.800	699.5	1021694.055	1890196.809	699.477	0.055	0.009	-0.023			
5	R5b-2-8955t	1021702.300	1890161.600	699.5	1021702.335	1890161.660	699.508	0.035	0.060	0.008			
5	R5b-2-8956t	1021717.900	1890155.800	698.9	1021717.894	1890155.773	699.150	-0.006	-0.027	0.250			
5	R5b-2-8960t	1021687.600	1890166.500	698.1	1021687.648	1890166.474	698.381	0.048	-0.026	0.281			
5	R5b-2-8975t	1021711.100	1890222.100	699.9	1021711.093	1890222.132	700.206	-0.007	0.032	0.306			
5	R5b-2-8977t	1021691.100	1890179.700	699.4	1021691.100	1890179.598	699.569	0.000	-0.102	0.169			
5	R5b-2-8985t	1021704.400	1890243.500	700.3	1021704.340	1890243.455	700.693	-0.060	-0.045	0.393			
5	R5b-2-9003t	1021705.100	1890209.500	GS	1021705.077	1890209.488	700.705	-0.023	-0.012	NA			
5	R5b-2-9004t	1021717.600	1890235.700	700.3	1021717.510	1890235.790	700.769	-0.090	0.090	0.469			
5	R5b-2-9005t	1021722.900	1890271.700	700.6	1021722.897	1890271.617	701.043	-0.003	-0.083	0.443			
5	R5b-2-9007t	1021741.300	1890297.100	700.6	1021741.294	1890297.066	701.063	-0.006	-0.034	0.463			
5	R5b-2-9009t	1021755.400	1890328.300	700.4	1021755.317	1890328.266	700.662	-0.083	-0.034	0.262			
5	R5b-2-9014t	1021710.900	1890205.100	700.0	1021710.837	1890205.058	700.073	-0.063	-0.042	0.073			
5	R5b-2-9015t	1021694.200	1890101.400	GS	1021694.232	1890101.315	697.647	0.032	-0.085	NA			
5	R5b-2-9016t	1021697.200	1890213.100	699.7	1021697.121	1890213.146	699.688	-0.079	0.046	-0.012			
5	R5b-2-9018t	1021696.300	1890230.300	698.6	1021696.287	1890230.421	698.818	-0.013	0.121	0.218			
5	R5b-2-9579t	1021731.300	1890285.500	700.0	1021731.263	1890285.544	699.480	-0.037	0.044	-0.520	Point was surveyed at existing ground surface		
5	R5b-2-9582t	1021748.600	1890313.400	700.5	1021748.552	1890313.363	700.899	-0.048	-0.037	0.399			
5	R5b-2-9588t	1021739.500	1890282.100	699.8	1021739.520	1890282.037	700.173	0.020	-0.063	0.373			
5	R5b-2-9589t	1021729.400	1890266.700	700.2	1021729.496	1890266.659	700.183	0.096	-0.041	-0.017			
5	R5b-2-9593t	1021709.500	1890260.300	699.5	1021709.540	1890260.372	699.603	0.040	0.072	0.103			
5	R5b-2-9656t	1021722.900	1890251.600	700.3	1021722.966	1890251.646	700.256	0.066	0.046	-0.044			

△ Elevation > 0.5 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation 0.5 to -0.25 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-2

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-2-9668t	1021728.500	1890255.900	699.9	1021728.577	1890255.929	699.870	0.077	0.029	-0.030			
5	R5b-2-T1	1021756.900	1890331.900	700.4	1021756.926	1890331.852	700.520	0.026	-0.048	0.120			
5	R5b-2-T10	1021744.000	1890280.700	699.8	1021743.909	1890280.717	700.253	-0.091	0.017	0.453			
5	R5b-2-T11	1021721.300	1890273.500	700.6	1021721.228	1890273.491	700.381	-0.072	-0.009	-0.219			
5	R5b-2-T12	1021731.400	1890265.700	700.2	1021731.442	1890265.731	700.166	0.042	0.031	-0.034			
5	R5b-2-T13	1021707.900	1890260.200	699.5	1021707.782	1890260.133	699.539	-0.118	-0.067	0.039			
5	R5b-2-T14	1021731.000	1890253.300	699.9	1021731.014	1890253.209	699.891	0.014	-0.091	-0.009			
5	R5b-2-T15	1021725.900	1890249.800	700.3	1021725.857	1890249.779	700.284	-0.043	-0.021	-0.016			
5	R5b-2-T16	1021703.400	1890244.500	700.3	1021703.377	1890244.522	700.249	-0.023	0.022	-0.051			
5	R5b-2-T17	1021695.100	1890231.700	698.6	1021695.049	1890231.704	698.802	-0.051	0.004	0.202			
5	R5b-2-T18	1021723.700	1890230.300	700.3	1021723.735	1890230.341	700.260	0.035	0.041	-0.040			
5	R5b-2-T19	1021715.100	1890221.300	699.9	1021715.105	1890221.238	700.042	0.005	-0.062	0.142			
5	R5b-2-T2	1021753.800	1890329.200	700.4	1021753.843	1890329.223	699.704	0.043	0.023	-0.696	Point was surveyed at existing ground surface		
5	R5b-2-T20	1021694.700	1890213.700	699.7	1021694.634	1890213.749	700.070	-0.066	0.049	0.370			
5	R5b-2-T21	1021715.000	1890203.100	700.0	1021715.024	1890203.143	700.372	0.024	0.043	0.372			
5	R5b-2-T22	1021690.400	1890198.000	699.5	1021690.390	1890197.997	699.621	-0.010	-0.003	0.121			
5	R5b-2-T23	1021712.600	1890188.400	699.9	1021712.638	1890188.320	700.331	0.038	-0.080	0.431			
5	R5b-2-T24	1021706.900	1890181.600	699.9	1021706.940	1890181.577	700.034	0.040	-0.023	0.134			
5	R5b-2-T25	1021687.800	1890181.400	699.4	1021687.770	1890181.410	699.400	-0.030	0.010	0.000			
5	R5b-2-T26	1021714.800	1890178.800	698.9	1021714.783	1890178.816	699.347	-0.017	0.016	0.447			
5	R5b-2-T27	1021717.300	1890170.400	698.9	1021717.330	1890170.352	699.092	0.030	-0.048	0.192			
5	R5b-2-T28	1021686.600	1890167.300	698.1	1021686.626	1890167.290	698.263	0.026	-0.010	0.163			
5	R5b-2-T29	1021719.400	1890162.400	698.9	1021719.377	1890162.389	699.141	-0.023	-0.011	0.241			
5	R5b-2-T3	1021758.500	1890326.700	700.4	1021758.574	1890326.644	701.194	0.074	-0.056	0.794	Tronox directed to take as TM due to stump		
5	R5b-2-T30	1021723.500	1890160.600	698.9	1021723.466	1890160.532	699.161	-0.034	-0.068	0.261			
5	R5b-2-T31	1021721.300	1890154.300	698.9	1021721.252	1890154.386	699.323	-0.048	0.086	0.423			
5	R5b-2-T32	1021716.300	1890152.600	698.9	1021716.283	1890152.503	699.115	-0.017	-0.097	0.215			
5	R5b-2-T33	1021685.900	1890151.400	698.8	1021685.959	1890151.310	699.192	0.059	-0.090	0.392			
5	R5b-2-T34	1021707.600	1890145.300	GS	1021707.559	1890145.371	699.836	-0.041	0.071	NA			
5	R5b-2-T35	1021680.900	1890135.200	GS	1021680.927	1890135.216	697.978	0.027	0.016	NA			
5	R5b-2-T36	1021708.200	1890129.500	699.0	1021708.165	1890129.504	699.316	-0.035	0.004	0.316			
5	R5b-2-T37	1021684.200	1890125.200	GS	1021684.204	1890125.240	698.395	0.004	0.040	NA			
5	R5b-2-T38	1021707.900	1890122.800	698.7	1021707.873	1890122.741	699.055	-0.027	-0.059	0.355			
5	R5b-2-T39	1021687.700	1890118.900	698.3	1021687.672	1890118.928	698.210	-0.028	0.028	-0.090			
5	R5b-2-T4	1021746.900	1890314.300	700.5	1021746.883	1890314.343	698.940	-0.017	0.043	-1.560	Point was surveyed at existing ground surface		
5	R5b-2-T40	1021701.600	1890117.600	GS	1021701.716	1890117.572	699.267	0.116	-0.028	NA			
5	R5b-2-T41	1021685.200	1890109.000	699.1	1021685.206	1890108.992	697.726	0.006	-0.008	-1.374	Point was surveyed at existing ground surface		

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-2

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-2-T42	1021699.700	1890103.500	698.0	1021699.662	1890103.570	698.363	-0.038	0.070	0.363			
5	R5b-2-T43	1021696.500	1890098.800	GS	1021696.523	1890098.818	697.780	0.023	0.018	NA			
5	R5b-2-T44	1021691.300	1890097.300	GS	1021691.212	1890097.252	697.445	-0.088	-0.048	NA			
5	R5b-2-T5	1021751.700	1890311.500	700.5	1021751.618	1890311.444	700.910	-0.082	-0.056	0.410			
5	R5b-2-T6	1021739.500	1890299.000	700.6	1021739.528	1890299.025	700.752	0.028	0.025	0.152			
5	R5b-2-T7	1021743.900	1890295.300	700.6	1021743.831	1890295.350	700.836	-0.069	0.050	0.236			
5	R5b-2-T8	1021730.000	1890286.100	700.0	1021729.948	1890286.061	698.423	-0.052	-0.039	-1.577	Point was surveyed at existing ground surface		
5	R5b-2-T9	1021741.500	1890285.000	699.8	1021741.526	1890284.953	699.977	0.026	-0.047	0.177			

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-3

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-3-14378t	1021448.000	1890000.000	698.4	1021448.056	1889999.941	698.647	0.056	-0.059	0.247			
5	R5b-3-8357t	1021459.500	1889985.200	GS	1021459.477	1889985.131	700.032	-0.023	-0.069	NA			
5	R5b-3-8358t	1021465.400	1889969.400	699.2	1021465.434	1889969.447	699.302	0.034	0.047	0.102			
5	R5b-3-8359t	1021467.000	1889963.200	698.1	1021466.940	1889963.327	698.486	-0.060	0.127	0.386			
5	R5b-3-8361t	1021482.200	1889960.800	697.3	1021482.249	1889960.764	697.563	0.049	-0.036	0.263			
5	R5b-3-8363t	1021488.700	1889963.400	698.7	1021488.760	1889963.375	698.977	0.060	-0.025	0.277			
5	R5b-3-8367t	1021476.300	1889983.900	699.2	1021476.259	1889983.888	699.191	-0.041	-0.012	-0.009			
5	R5b-3-8373t	1021481.100	1889969.700	699.0	1021481.130	1889969.632	699.262	0.030	-0.068	0.262			
5	R5b-3-8374t	1021454.000	1890001.600	GS	1021454.029	1890001.453	700.535	0.029	-0.147	NA			
5	R5b-3-8375t	1021455.600	1889963.900	698.4	1021455.651	1889963.952	698.849	0.051	0.052	0.449			
5	R5b-3-8376t	1021449.900	1889979.000	699.4	1021449.828	1889979.079	699.711	-0.072	0.079	0.311			
5	R5b-3-8377t	1021446.400	1889987.200	699.4	1021446.444	1889987.172	699.626	0.044	-0.028	0.226			
5	R5b-3-8381t	1021439.700	1889968.600	GS	1021439.751	1889968.472	700.164	0.051	-0.128	NA			
5	R5b-3-8382t	1021432.500	1889983.700	698.5	1021432.482	1889983.724	698.911	-0.018	0.024	0.411			
5	R5b-3-8384t	1021512.100	1889968.200	699.0	1021512.113	1889968.282	699.335	0.013	0.082	0.335			
5	R5b-3-8386t	1021527.100	1889970.700	GS	1021527.152	1889970.623	699.770	0.052	-0.077	NA			
5	R5b-3-8395t	1021472.900	1890003.600	699.3	1021472.927	1890003.633	699.770	0.027	0.033	0.470			
5	R5b-3-8396t	1021479.900	1890001.600	699.4	1021479.812	1890001.669	699.688	-0.088	0.069	0.288			
5	R5b-3-8401t	1021495.700	1889977.600	699.2	1021495.630	1889977.631	699.384	-0.070	0.031	0.184			
5	R5b-3-8403t	1021536.500	1889973.100	698.8	1021536.496	1889972.995	699.196	-0.004	-0.105	0.396			
5	R5b-3-8404t	1021471.800	1890009.300	699.3	1021471.830	1890009.276	699.736	0.030	-0.024	0.436			
5	R5b-3-8454t	1021460.700	1889960.800	GS	1021460.641	1889960.810	698.372	-0.059	0.010	NA			
5	R5b-3-8456t	1021455.500	1889962.500	GS	1021455.525	1889962.473	698.673	0.025	-0.027	NA			
5	R5b-3-8458t	1021441.000	1889964.800	GS	1021441.017	1889964.860	699.074	0.017	0.060	NA			
5	R5b-3-8463t	1021428.300	1889974.200	GS	1021428.392	1889974.227	700.929	0.092	0.027	NA			
5	R5b-3-T1	1021479.800	1890013.700	699.3	1021479.853	1890013.630	699.660	0.053	-0.070	0.360			
5	R5b-3-T10	1021430.600	1889987.200	698.5	1021430.651	1889987.324	698.906	0.051	0.124	0.406			
5	R5b-3-T11	1021480.300	1889984.700	699.2	1021480.280	1889984.661	699.389	-0.020	-0.039	0.189			
5	R5b-3-T12	1021494.300	1889981.300	699.2	1021494.325	1889981.257	699.395	0.025	-0.043	0.195			
5	R5b-3-T13	1021424.700	1889980.500	GS	1021424.704	1889980.587	700.968	0.004	0.087	NA			
5	R5b-3-T14	1021502.000	1889980.500	699.2	1021502.045	1889980.494	699.626	0.045	-0.006	0.426			
5	R5b-3-T15	1021427.000	1889978.700	GS	1021426.902	1889978.783	700.879	-0.098	0.083	NA			
5	R5b-3-T16	1021499.000	1889976.900	699.2	1021498.953	1889976.974	699.197	-0.047	0.074	-0.003			
5	R5b-3-T17	1021535.100	1889976.900	698.8	1021535.124	1889976.932	699.070	0.024	0.032	0.270			
5	R5b-3-T18	1021421.900	1889976.400	GS	1021421.825	1889976.505	701.018	-0.075	0.105	NA			
5	R5b-3-T19	1021540.300	1889976.100	698.8	1021540.344	1889976.089	699.266	0.044	-0.011	0.466			
5	R5b-3-T2	1021471.500	1890013.200	699.3	1021471.567	1890013.235	699.793	0.067	0.035	0.493			

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-3

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-3-T20	1021526.600	1889974.800	GS	1021526.619	1889974.798	699.722	0.019	-0.002	NA			
5	R5b-3-T21	1021507.200	1889972.200	699.0	1021507.156	1889972.194	699.350	-0.044	-0.006	0.350			
5	R5b-3-T22	1021545.500	1889971.500	698.8	1021545.554	1889971.425	699.036	0.054	-0.075	0.236			
5	R5b-3-T23	1021537.500	1889969.500	698.8	1021537.464	1889969.578	699.178	-0.036	0.078	0.378			
5	R5b-3-T24	1021429.700	1889969.400	GS	1021429.630	1889969.486	700.726	-0.070	0.086	NA			
5	R5b-3-T25	1021541.700	1889968.400	698.8	1021541.722	1889968.356	699.255	0.022	-0.044	0.455			
5	R5b-3-T26	1021528.500	1889967.300	GS	1021528.586	1889967.351	699.110	0.086	0.051	NA			
5	R5b-3-T27	1021513.600	1889964.400	699.0	1021513.577	1889964.407	699.328	-0.023	0.007	0.328			
5	R5b-3-T28	1021489.000	1889961.000	698.7	1021489.015	1889960.970	698.823	0.015	-0.030	0.123			
5	R5b-3-T29	1021440.700	1889960.800	GS	1021440.793	1889960.820	699.344	0.093	0.020	NA			
5	R5b-3-T3	1021483.900	1890009.900	699.4	1021483.832	1890009.990	699.583	-0.068	0.090	0.183			
5	R5b-3-T30	1021455.300	1889959.600	GS	1021455.307	1889959.644	698.614	0.007	0.044	NA			
5	R5b-3-T31	1021479.000	1889959.400	697.3	1021479.079	1889959.379	697.457	0.079	-0.021	0.157			
5	R5b-3-T32	1021468.000	1889959.200	698.1	1021468.057	1889959.242	698.532	0.057	0.042	0.432			
5	R5b-3-T33	1021460.400	1889957.100	GS	1021460.437	1889957.073	698.383	0.037	-0.027	NA			
5	R5b-3-T34	1021483.100	1889957.100	697.3	1021483.047	1889957.070	697.715	-0.053	-0.030	0.415			
5	R5b-3-T4	1021467.300	1890007.000	699.3	1021467.334	1890006.989	699.672	0.034	-0.011	0.372			
5	R5b-3-T5	1021452.900	1890005.500	GS	1021453.007	1890005.544	700.902	0.107	0.044	NA			
5	R5b-3-T6	1021445.700	1890003.100	698.4	1021445.596	1890002.988	698.812	-0.104	-0.112	0.412			
5	R5b-3-T7	1021485.300	1890000.900	699.4	1021485.269	1890000.837	699.623	-0.031	-0.063	0.223			
5	R5b-3-T8	1021481.300	1889997.800	699.4	1021481.326	1889997.789	699.813	0.026	-0.011	0.413			
5	R5b-3-T9	1021445.000	1889991.900	699.4	1021444.978	1889991.840	699.659	-0.022	-0.060	0.259			

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-4

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-4-8502t	1021325.400	1889699.400	698.3	1021325.480	1889699.386	698.501	0.080	-0.014	0.201		
5	R5b-4-8560t	1021316.200	1889725.300	GS	1021316.128	1889725.246	699.714	-0.072	-0.054	NA		
5	R5b-4-8563t	1021324.500	1889725.300	698.8	1021324.414	1889725.392	699.691	-0.086	0.092	0.891	Tronox directed to take all material as targeted	
5	R5b-4-8564t	1021331.300	1889712.600	698.5	1021331.184	1889712.521	699.552	-0.116	-0.079	1.052	Tronox directed to take all material as targeted	
5	R5b-4-8565t	1021309.800	1889725.600	697.3	1021309.706	1889725.591	698.796	-0.094	-0.009	1.496	Tronox directed to take all material as targeted	
5	R5b-4-8568t	1021315.300	1889713.000	698.6	1021315.192	1889713.008	699.553	-0.108	0.008	0.953	Tronox directed to take all material as targeted	
5	R5b-4-8572t	1021329.600	1889699.700	698.3	1021329.481	1889699.693	699.213	-0.119	-0.007	0.913	Tronox directed to take all material as targeted	
5	R5b-4-8602t	1021309.700	1889739.300	698.1	1021309.607	1889739.343	699.287	-0.093	0.043	1.187	Tronox directed to take all material as targeted	
5	R5b-4-8609t	1021329.600	1889737.800	699.0	1021329.534	1889737.785	699.785	-0.066	-0.015	0.785	Tronox directed to take all material as targeted	
5	R5b-4-8610t	1021310.800	1889719.400	698.4	1021310.834	1889719.285	699.074	0.034	-0.115	0.674	Tronox directed to take all material as targeted	
5	R5b-4-8612t	1021314.800	1889770.500	698.1	1021314.849	1889770.398	699.494	0.049	-0.102	1.394	Tronox directed to take all material as targeted	
5	R5b-4-8618t	1021310.900	1889755.200	697.7	1021310.914	1889755.177	699.447	0.014	-0.023	1.747	Tronox directed to take all material as targeted	
5	R5b-4-8626t	1021329.800	1889766.100	699.4	1021329.720	1889766.080	700.083	-0.080	-0.020	0.683	Tronox directed to take all material as targeted	
5	R5b-4-8629t	1021329.400	1889752.900	699.2	1021329.351	1889752.900	700.112	-0.049	0.000	0.912	Tronox directed to take all material as targeted	
5	R5b-4-8666t	1021337.100	1889834.300	697.6	1021337.011	1889834.258	700.136	-0.089	-0.042	2.536	Tronox directed to take all material as targeted	
5	R5b-4-8669t	1021331.600	1889802.800	GS	1021331.511	1889802.739	699.889	-0.089	-0.061	NA		
5	R5b-4-8671t	1021320.900	1889795.600	697.8	1021320.962	1889795.583	699.659	0.062	-0.017	1.859	Tronox directed to take all material as targeted	
5	R5b-4-8673t	1021321.400	1889788.100	698.9	1021321.427	1889788.118	699.806	0.027	0.018	0.906	Tronox directed to take all material as targeted	
5	R5b-4-8676t	1021359.000	1889845.300	699.9	1021358.983	1889845.225	700.410	-0.017	-0.075	0.510	Tronox directed to take all material as targeted	
5	R5b-4-8677t	1021336.700	1889820.700	699.1	1021336.609	1889820.593	699.882	-0.091	-0.107	0.782	Tronox directed to take all material as targeted	
5	R5b-4-8678t	1021349.600	1889826.500	699.7	1021349.600	1889826.420	700.426	0.000	-0.080	0.726	Tronox directed to take all material as targeted	
5	R5b-4-8679t	1021340.800	1889812.700	699.4	1021340.725	1889812.594	700.134	-0.075	-0.106	0.734	Tronox directed to take all material as targeted	
5	R5b-4-8681t	1021332.300	1889807.800	GS	1021332.312	1889807.713	699.805	0.012	-0.087	NA		
5	R5b-4-8682t	1021345.000	1889833.500	GS	1021345.116	1889833.453	699.940	0.116	-0.047	NA		
5	R5b-4-8684t	1021338.600	1889787.500	699.5	1021338.688	1889787.563	700.138	0.088	0.063	0.638	Tronox directed to take all material as targeted	
5	R5b-4-8685t	1021341.900	1889839.400	699.4	1021341.847	1889839.308	700.271	-0.053	-0.092	0.871	Tronox directed to take all material as targeted	
5	R5b-4-8690t	1021338.900	1889803.300	699.5	1021338.866	1889803.320	700.219	-0.034	0.020	0.719	Tronox directed to take all material as targeted	
5	R5b-4-8726t	1021362.600	1889872.400	GS	1021362.573	1889872.299	698.465	-0.027	-0.101	NA		
5	R5b-4-8727t	1021363.200	1889869.600	698.3	1021363.289	1889869.529	699.975	0.089	-0.071	1.675	Tronox directed to take all material as targeted	
5	R5b-4-8729t	1021368.000	1889862.000	699.7	1021367.999	1889861.898	700.397	-0.001	-0.102	0.697	Tronox directed to take all material as targeted	
5	R5b-4-8731t	1021363.600	1889848.900	699.3	1021363.635	1889848.839	700.478	0.035	-0.061	1.178	Tronox directed to take all material as targeted	
5	R5b-4-8733t	1021355.600	1889864.300	698.5	1021355.549	1889864.271	699.698	-0.051	-0.029	1.198	Tronox directed to take all material as targeted	
5	R5b-4-8748t	1021356.400	1889852.200	699.0	1021356.272	1889852.245	700.284	-0.128	0.045	1.284	Tronox directed to take all material as targeted	
5	R5b-4-8761t	1021376.600	1889877.900	698.7	1021376.622	1889877.978	700.278	0.022	0.078	1.578	Tronox directed to take all material as targeted	
5	R5b-4-8789t	1021370.600	1889873.400	699.4	1021370.555	1889873.393	699.683	-0.045	-0.007	0.283		
5	R5b-4-T1	1021379.300	1889881.400	698.7	1021379.256	1889881.341	700.269	-0.044	-0.059	1.569	Tronox directed to take all material as targeted	
5	R5b-4-T10	1021352.700	1889861.400	698.5	1021352.738	1889861.324	699.469	0.038	-0.076	0.969	Tronox directed to take all material as targeted	

△ Elevation > 0.5 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation 0.5 to -0.25 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-4

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-4-T11	1021369.600	1889858.800	699.7	1021369.488	1889858.789	700.411	-0.112	-0.011	0.711	Trinox directed to take all material as targeted
5	R5b-4-T12	1021353.100	1889855.400	699.0	1021353.081	1889855.353	700.424	-0.019	-0.047	1.424	Trinox directed to take all material as targeted
5	R5b-4-T13	1021367.300	1889845.700	699.3	1021367.183	1889845.726	700.509	-0.117	0.026	1.209	Trinox directed to take all material as targeted
5	R5b-4-T14	1021361.900	1889841.800	699.9	1021361.907	1889841.656	700.571	0.007	-0.144	0.671	Trinox directed to take all material as targeted
5	R5b-4-T15	1021336.700	1889841.200	699.4	1021336.571	1889841.252	699.860	-0.129	0.052	0.460	
5	R5b-4-T16	1021348.800	1889836.300	GS	1021348.743	1889836.153	700.106	-0.057	-0.147	NA	
5	R5b-4-T17	1021332.400	1889834.200	697.6	1021332.336	1889834.071	700.568	-0.064	-0.129	2.968	Trinox directed to take all material as targeted
5	R5b-4-T18	1021352.600	1889829.800	699.7	1021352.660	1889829.896	700.459	0.060	0.096	0.759	Trinox directed to take all material as targeted
5	R5b-4-T19	1021334.400	1889824.200	699.1	1021334.433	1889824.254	699.904	0.033	0.054	0.804	Trinox directed to take all material as targeted
5	R5b-4-T2	1021375.300	1889879.400	698.7	1021375.240	1889879.314	699.218	-0.060	-0.086	0.518	Trinox directed to take all material as targeted
5	R5b-4-T20	1021352.700	1889823.500	699.7	1021352.771	1889823.514	700.407	0.071	0.014	0.707	Trinox directed to take all material as targeted
5	R5b-4-T21	1021329.500	1889820.000	699.1	1021329.572	1889820.026	699.937	0.072	0.026	0.837	Trinox directed to take all material as targeted
5	R5b-4-T22	1021332.400	1889816.200	699.1	1021332.343	1889816.252	699.978	-0.057	0.052	0.878	Trinox directed to take all material as targeted
5	R5b-4-T23	1021342.900	1889810.200	699.4	1021342.989	1889810.150	700.202	0.089	-0.050	0.802	Trinox directed to take all material as targeted
5	R5b-4-T24	1021330.100	1889809.700	GS	1021330.049	1889809.750	699.782	-0.051	0.050	NA	
5	R5b-4-T25	1021326.000	1889802.800	GS	1021325.977	1889802.877	699.697	-0.023	0.077	NA	
5	R5b-4-T26	1021342.200	1889802.500	699.5	1021342.262	1889802.419	700.352	0.062	-0.081	0.852	Trinox directed to take all material as targeted
5	R5b-4-T27	1021316.900	1889795.700	697.8	1021316.835	1889795.645	699.907	-0.065	-0.055	2.107	Trinox directed to take all material as targeted
5	R5b-4-T28	1021317.100	1889788.500	698.9	1021317.052	1889788.501	699.868	-0.048	0.001	0.968	Trinox directed to take all material as targeted
5	R5b-4-T29	1021342.900	1889787.200	699.5	1021342.916	1889787.295	700.292	0.016	0.095	0.792	Trinox directed to take all material as targeted
5	R5b-4-T3	1021359.600	1889878.800	GS	1021359.650	1889878.728	697.362	0.050	-0.072	NA	
5	R5b-4-T30	1021311.200	1889771.200	698.1	1021311.319	1889771.236	699.715	0.119	0.036	1.615	Trinox directed to take all material as targeted
5	R5b-4-T31	1021335.100	1889764.300	699.4	1021334.986	1889764.215	700.853	-0.114	-0.085	1.453	Trinox directed to take all material as targeted
5	R5b-4-T32	1021307.300	1889755.000	697.7	1021307.147	1889754.972	699.577	-0.153	-0.028	1.877	Trinox directed to take all material as targeted
5	R5b-4-T33	1021333.200	1889751.800	699.2	1021333.112	1889751.707	700.054	-0.088	-0.093	0.854	Trinox directed to take all material as targeted
5	R5b-4-T34	1021306.500	1889739.700	698.1	1021306.404	1889739.695	699.338	-0.096	-0.005	1.238	Trinox directed to take all material as targeted
5	R5b-4-T35	1021333.400	1889737.800	699.0	1021333.271	1889737.867	699.848	-0.129	0.067	0.848	Trinox directed to take all material as targeted
5	R5b-4-T36	1021305.000	1889725.600	697.3	1021304.924	1889725.560	698.661	-0.076	-0.040	1.361	Trinox directed to take all material as targeted
5	R5b-4-T37	1021328.200	1889721.600	698.8	1021328.312	1889721.593	699.381	0.112	-0.007	0.581	Trinox directed to take all material as targeted
5	R5b-4-T38	1021307.100	1889718.200	698.4	1021306.969	1889718.165	698.591	-0.131	-0.035	0.191	
5	R5b-4-T39	1021334.900	1889712.600	698.5	1021334.846	1889712.495	699.407	-0.054	-0.105	0.907	Trinox directed to take all material as targeted
5	R5b-4-T4	1021368.900	1889876.300	699.4	1021368.933	1889876.315	698.564	0.033	0.015	-0.836	Point was surveyed at existing ground surface
5	R5b-4-T40	1021313.400	1889712.100	698.6	1021313.222	1889712.124	698.449	-0.178	0.024	-0.151	
5	R5b-4-T41	1021331.600	1889700.100	698.3	1021331.593	1889700.054	699.193	-0.007	-0.046	0.893	Trinox directed to take all material as targeted
5	R5b-4-T42	1021324.000	1889698.900	698.3	1021324.083	1889698.880	698.223	0.083	-0.020	-0.077	
5	R5b-4-T43	1021332.300	1889695.600	698.3	1021332.336	1889695.663	698.547	0.036	0.063	0.247	
5	R5b-4-T44	1021327.300	1889694.800	698.3	1021327.283	1889694.699	698.174	-0.017	-0.101	-0.126	

Δ Elevation > 0.5 ft Blue

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Δ Elevation 0.5 to -0.25 ft Green

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Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-4

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-4-T5	1021384.900	1889875.600	698.7	1021384.848	1889875.571	700.593	-0.052	-0.029	1.893	Tronox directed to take all material as targeted
5	R5b-4-T6	1021377.900	1889874.300	698.7	1021377.862	1889874.208	700.456	-0.038	-0.092	1.756	Tronox directed to take all material as targeted
5	R5b-4-T7	1021372.000	1889870.800	699.4	1021372.028	1889870.756	700.372	0.028	-0.044	0.972	Tronox directed to take all material as targeted
5	R5b-4-T8	1021358.700	1889868.300	698.3	1021358.609	1889868.166	699.732	-0.091	-0.134	1.432	Tronox directed to take all material as targeted
5	R5b-4-T9	1021354.900	1889865.600	698.5	1021354.988	1889865.592	698.536	0.088	-0.008	0.036	

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-5

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-5-8437t	1021062.800	1889419.300	697.8	1021062.681	1889419.286	698.402	-0.119	-0.014	0.602	Tronox directed to take all material as targeted
5	R5b-5-8482t	1021136.900	1889503.500	698.9	1021136.934	1889503.363	699.520	0.034	-0.137	0.620	Tronox directed to take all material as targeted
5	R5b-5-8484t	1021080.600	1889444.500	GS	1021080.549	1889444.498	698.847	-0.051	-0.002	NA	
5	R5b-5-8489t	1021088.800	1889458.800	698.3	1021088.757	1889458.735	698.570	-0.043	-0.065	0.270	
5	R5b-5-8490t	1021124.500	1889491.900	699.0	1021124.470	1889491.997	699.461	-0.030	0.097	0.461	
5	R5b-5-8492t	1021113.100	1889479.700	698.8	1021113.013	1889479.683	699.359	-0.087	-0.017	0.559	Tronox directed to take all material as targeted
5	R5b-5-8497t	1021069.100	1889434.500	698.2	1021069.108	1889434.382	698.663	0.008	-0.118	0.463	
5	R5b-5-8498t	1021100.600	1889468.400	698.6	1021100.521	1889468.378	699.754	-0.079	-0.022	1.154	Tronox directed to take all material as targeted
5	R5b-5-8500t	1021064.500	1889411.700	GS	1021064.523	1889411.632	698.957	0.023	-0.068	NA	
5	R5b-5-8797t	1021144.200	1889507.800	699.0	1021144.207	1889507.775	699.694	0.007	-0.025	0.694	Tronox directed to take all material as targeted
5	R5b-5-T1	1021143.800	1889513.700	699.0	1021143.815	1889513.666	697.393	0.015	-0.034	-1.607	Point was surveyed at existing ground surface
5	R5b-5-T10	1021099.700	1889469.600	698.6	1021099.676	1889469.678	697.941	-0.024	0.078	-0.659	Point was surveyed at existing ground surface
5	R5b-5-T11	1021105.400	1889467.900	698.6	1021105.450	1889467.917	699.967	0.050	0.017	1.367	Tronox directed to take all material as targeted
5	R5b-5-T12	1021103.200	1889462.600	698.6	1021103.136	1889462.506	699.880	-0.064	-0.094	1.280	Tronox directed to take all material as targeted
5	R5b-5-T13	1021087.600	1889459.300	698.3	1021087.629	1889459.210	697.431	0.029	-0.090	-0.869	Point was surveyed at existing ground surface
5	R5b-5-T14	1021093.400	1889458.000	698.3	1021093.416	1889457.944	699.415	0.016	-0.056	1.115	Tronox directed to take all material as targeted
5	R5b-5-T15	1021079.900	1889445.000	GS	1021079.894	1889445.025	698.283	-0.006	0.025	NA	
5	R5b-5-T16	1021084.900	1889443.900	GS	1021084.964	1889443.872	699.669	0.064	-0.028	NA	
5	R5b-5-T17	1021068.100	1889435.200	698.2	1021068.171	1889435.288	697.075	0.071	0.088	-1.125	Point was surveyed at existing ground surface
5	R5b-5-T18	1021071.500	1889434.100	698.2	1021071.458	1889434.169	699.249	-0.042	0.069	1.049	Tronox directed to take all material as targeted
5	R5b-5-T19	1021061.800	1889419.300	697.8	1021061.737	1889419.262	697.825	-0.063	-0.038	0.025	
5	R5b-5-T2	1021146.900	1889509.800	699.0	1021146.808	1889509.745	699.681	-0.092	-0.055	0.681	Tronox directed to take all material as targeted
5	R5b-5-T20	1021066.500	1889417.900	697.8	1021066.517	1889417.808	699.275	0.017	-0.092	1.475	Tronox directed to take all material as targeted
5	R5b-5-T21	1021067.500	1889411.800	GS	1021067.581	1889411.903	699.258	0.081	0.103	NA	
5	R5b-5-T22	1021063.300	1889411.600	GS	1021063.282	1889411.489	698.704	-0.018	-0.111	NA	
5	R5b-5-T23	1021064.300	1889408.000	GS	1021064.345	1889407.965	698.833	0.045	-0.035	NA	
5	R5b-5-T24	1021067.300	1889408.000	GS	1021067.205	1889408.007	699.135	-0.095	0.007	NA	
5	R5b-5-T3	1021147.200	1889506.100	699.0	1021147.105	1889506.067	699.886	-0.095	-0.033	0.886	Tronox directed to take all material as targeted
5	R5b-5-T4	1021135.400	1889504.400	698.9	1021135.357	1889504.491	697.482	-0.043	0.091	-1.418	Point was surveyed at existing ground surface
5	R5b-5-T5	1021140.100	1889501.600	698.9	1021140.115	1889501.663	699.835	0.015	0.063	0.935	Tronox directed to take all material as targeted
5	R5b-5-T6	1021122.700	1889492.400	699.0	1021122.707	1889492.509	697.350	0.007	0.109	-1.650	Point was surveyed at existing ground surface
5	R5b-5-T7	1021128.300	1889490.900	699.0	1021128.226	1889490.822	699.964	-0.074	-0.078	0.964	Tronox directed to take all material as targeted
5	R5b-5-T8	1021112.300	1889480.300	698.8	1021112.267	1889480.391	698.001	-0.033	0.091	-0.799	Point was surveyed at existing ground surface
5	R5b-5-T9	1021117.600	1889478.900	698.8	1021117.577	1889478.985	700.000	-0.023	0.085	1.200	Tronox directed to take all material as targeted

△ Elevation > 0.5 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation 0.5 to -0.25 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-6

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-6-8338t	1020990.300	1889290.900	698.8	1020990.356	1889290.876	699.291	0.056	-0.024	0.491	Trinox directed to take all material as targeted
5	R5b-6-8339t	1020982.900	1889278.900	698.7	1020982.952	1889278.872	699.309	0.052	-0.028	0.609	Trinox directed to take all material as targeted
5	R5b-6-8342t	1020996.200	1889286.700	698.4	1020996.265	1889286.716	699.652	0.065	0.016	1.252	Trinox directed to take all material as targeted
5	R5b-6-8346t	1020982.300	1889295.000	698.7	1020982.235	1889294.961	699.244	-0.065	-0.039	0.544	Trinox directed to take all material as targeted
5	R5b-6-8347t	1020972.500	1889253.400	GS	1020972.432	1889253.470	699.127	-0.068	0.070	NA	
5	R5b-6-8348t	1020973.300	1889282.500	697.6	1020973.250	1889282.462	698.583	-0.050	-0.038	0.983	Trinox directed to take all material as targeted
5	R5b-6-8352t	1020994.300	1889306.000	698.8	1020994.306	1889306.069	699.300	0.006	0.069	0.500	Trinox directed to take all material as targeted
5	R5b-6-8353t	1020966.800	1889267.400	697.4	1020966.643	1889267.283	697.249	-0.157	-0.117	-0.151	
5	R5b-6-8428t	1020992.300	1889281.200	698.3	1020992.295	1889281.153	699.466	-0.005	-0.047	1.166	Trinox directed to take all material as targeted
5	R5b-6-8432t	1021001.300	1889301.600	698.6	1021001.261	1889301.644	699.405	-0.039	0.044	0.805	Trinox directed to take all material as targeted
5	R5b-6-8434t	1021002.300	1889293.500	698.7	1021002.418	1889293.517	699.384	0.118	0.017	0.684	Trinox directed to take all material as targeted
5	R5b-6-8440t	1021006.100	1889315.900	698.6	1021006.122	1889315.859	699.472	0.022	-0.041	0.872	Trinox directed to take all material as targeted
5	R5b-6-8442t	1021012.900	1889311.600	698.9	1021012.978	1889311.621	699.714	0.078	0.021	0.814	Trinox directed to take all material as targeted
5	R5b-6-8444t	1021020.100	1889321.600	698.8	1021020.114	1889321.552	699.273	0.014	-0.048	0.473	Trinox directed to take all material as targeted
5	R5b-6-8538t	1020974.500	1889267.600	698.0	1020974.425	1889267.687	699.423	-0.075	0.087	1.423	Trinox directed to take all material as targeted
5	R5b-6-T1	1021023.800	1889322.700	698.8	1021023.716	1889322.820	697.444	-0.084	0.120	-1.356	Point was surveyed at existing ground surface
5	R5b-6-T10	1020980.800	1889295.000	698.7	1020980.884	1889295.058	698.870	0.084	0.058	0.170	
5	R5b-6-T11	1021005.900	1889290.600	698.7	1021005.773	1889290.516	699.291	-0.127	-0.084	0.591	Trinox directed to take all material as targeted
5	R5b-6-T12	1020973.100	1889283.800	697.6	1020973.127	1889283.839	696.898	0.027	0.039	-0.702	Point was surveyed at existing ground surface
5	R5b-6-T13	1020996.500	1889278.800	698.3	1020996.592	1889278.877	699.461	0.092	0.077	1.161	Trinox directed to take all material as targeted
5	R5b-6-T14	1020986.300	1889276.700	698.7	1020986.275	1889276.630	699.358	-0.025	-0.070	0.658	Trinox directed to take all material as targeted
5	R5b-6-T15	1020965.500	1889267.100	697.4	1020965.497	1889267.019	696.908	-0.003	-0.081	-0.492	Point was surveyed at existing ground surface
5	R5b-6-T16	1020977.000	1889263.700	698.0	1020977.011	1889263.737	699.242	0.011	0.037	1.242	Trinox directed to take all material as targeted
5	R5b-6-T17	1020976.000	1889256.600	GS	1020976.090	1889256.501	699.145	0.090	-0.099	NA	
5	R5b-6-T18	1020971.100	1889254.000	GS	1020971.183	1889254.087	698.589	0.083	0.087	NA	
5	R5b-6-T19	1020973.200	1889249.100	GS	1020973.157	1889249.136	699.251	-0.043	0.036	NA	
5	R5b-6-T2	1021019.100	1889322.600	698.8	1021019.134	1889322.516	697.516	0.034	-0.084	-1.284	Point was surveyed at existing ground surface
5	R5b-6-T20	1020980.000	1889248.800	GS	1020979.963	1889248.795	699.160	-0.037	-0.005	NA	
5	R5b-6-T3	1021023.100	1889320.100	698.8	1021023.125	1889320.187	699.175	0.025	0.087	0.375	
5	R5b-6-T4	1021006.100	1889317.100	698.6	1021006.097	1889317.043	697.978	-0.003	-0.057	-0.622	Point was surveyed at existing ground surface
5	R5b-6-T5	1021009.500	1889315.000	698.6	1021009.547	1889315.031	699.329	0.047	0.031	0.729	Trinox directed to take all material as targeted
5	R5b-6-T6	1021016.000	1889313.100	698.9	1021016.060	1889313.155	699.615	0.060	0.055	0.715	Trinox directed to take all material as targeted
5	R5b-6-T7	1021016.100	1889310.400	698.9	1021015.998	1889310.301	699.613	-0.102	-0.099	0.713	Trinox directed to take all material as targeted
5	R5b-6-T8	1020994.000	1889307.600	698.8	1020994.131	1889307.552	698.963	0.131	-0.048	0.163	
5	R5b-6-T9	1021005.100	1889299.300	698.6	1021005.080	1889299.357	699.330	-0.020	0.057	0.730	Trinox directed to take all material as targeted

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-7

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-7-8292t	1020906.900	1889166.700	696.8	1020906.728	1889166.817	697.068	-0.172	0.117	0.268	Trinox directed to take all material as targeted
5	R5b-7-8293t	1020944.200	1889219.200	697.9	1020944.272	1889219.205	698.642	0.072	0.005	0.742	Trinox directed to take all material as targeted
5	R5b-7-8300t	1020912.700	1889161.000	697.5	1020912.629	1889161.051	698.768	-0.071	0.051	1.268	Trinox directed to take all material as targeted
5	R5b-7-8303t	1020900.700	1889153.100	697.0	1020900.743	1889153.094	696.954	0.043	-0.006	-0.046	
5	R5b-7-8304t	1020892.200	1889136.900	GS	1020892.153	1889136.848	697.664	-0.047	-0.052	NA	
5	R5b-7-8306t	1020880.700	1889126.300	697.4	1020880.595	1889126.211	696.971	-0.105	-0.089	-0.429	Point was surveyed at existing ground surface
5	R5b-7-8320t	1020868.200	1889115.700	697.8	1020868.132	1889115.704	696.880	-0.068	0.004	-0.920	Point was surveyed at existing ground surface
5	R5b-7-8326t	1020926.500	1889192.800	697.7	1020926.451	1889192.709	698.121	-0.049	-0.091	0.421	Trinox directed to take all material as targeted
5	R5b-7-8329t	1020916.000	1889178.900	697.5	1020916.071	1889178.984	698.305	0.071	0.084	0.805	Trinox directed to take all material as targeted
5	R5b-7-8331t	1020916.400	1889164.900	698.2	1020916.314	1889164.897	698.988	-0.086	-0.003	0.788	Trinox directed to take all material as targeted
5	R5b-7-8334t	1020931.400	1889186.600	698.2	1020931.354	1889186.610	699.113	-0.046	0.010	0.913	Trinox directed to take all material as targeted
5	R5b-7-8335t	1020935.900	1889205.200	697.2	1020935.820	1889205.217	698.269	-0.080	0.017	1.069	Trinox directed to take all material as targeted
5	R5b-7-8345t	1020955.600	1889230.700	GS	1020955.565	1889230.723	698.084	-0.035	0.023	NA	
5	R5b-7-T1	1020959.700	1889232.100	GS	1020959.834	1889232.236	698.526	0.134	0.136	NA	
5	R5b-7-T10	1020936.900	1889187.600	698.2	1020936.907	1889187.568	699.006	0.007	-0.032	0.806	Trinox directed to take all material as targeted
5	R5b-7-T11	1020933.900	1889184.400	698.2	1020933.868	1889184.418	698.992	-0.032	0.018	0.792	Trinox directed to take all material as targeted
5	R5b-7-T12	1020915.300	1889179.200	697.5	1020915.321	1889179.342	697.033	0.021	0.142	-0.467	Point was surveyed at existing ground surface
5	R5b-7-T13	1020921.100	1889178.300	697.5	1020920.986	1889178.297	698.826	-0.114	-0.003	1.326	Trinox directed to take all material as targeted
5	R5b-7-T14	1020919.100	1889168.600	698.2	1020918.983	1889168.487	698.975	-0.117	-0.113	0.775	Trinox directed to take all material as targeted
5	R5b-7-T15	1020904.300	1889168.000	696.8	1020904.228	1889168.053	696.536	-0.072	0.053	-0.264	Point was surveyed at existing ground surface
5	R5b-7-T16	1020922.300	1889165.900	698.2	1020922.338	1889165.943	699.123	0.038	0.043	0.923	Trinox directed to take all material as targeted
5	R5b-7-T17	1020917.800	1889156.800	697.5	1020917.827	1889156.878	699.016	0.027	0.078	1.516	Trinox directed to take all material as targeted
5	R5b-7-T18	1020899.700	1889153.400	697.0	1020899.622	1889153.432	696.762	-0.078	0.032	-0.238	
5	R5b-7-T19	1020905.600	1889153.200	697.0	1020905.546	1889153.207	698.561	-0.054	0.007	1.561	Trinox directed to take all material as targeted
5	R5b-7-T2	1020955.300	1889231.200	GS	1020955.317	1889231.322	697.545	0.017	0.122	NA	
5	R5b-7-T20	1020890.800	1889137.800	GS	1020890.899	1889137.696	697.184	0.099	-0.104	NA	
5	R5b-7-T21	1020894.900	1889134.700	GS	1020894.903	1889134.698	698.618	0.003	-0.002	NA	
5	R5b-7-T22	1020879.400	1889127.100	697.4	1020879.437	1889127.164	696.842	0.037	0.064	-0.558	Point was surveyed at existing ground surface
5	R5b-7-T23	1020883.400	1889122.500	697.4	1020883.460	1889122.447	698.972	0.060	-0.053	1.572	Trinox directed to take all material as targeted
5	R5b-7-T24	1020867.000	1889116.800	697.8	1020867.029	1889116.818	696.549	0.029	0.018	-1.251	Point was surveyed at existing ground surface
5	R5b-7-T25	1020865.400	1889111.800	697.8	1020865.322	1889111.706	698.056	-0.078	-0.094	0.256	
5	R5b-7-T26	1020868.300	1889108.200	697.8	1020868.262	1889108.210	698.561	-0.038	0.010	0.761	Trinox directed to take all material as targeted
5	R5b-7-T3	1020958.600	1889227.800	GS	1020958.487	1889227.893	698.979	-0.113	0.093	NA	
5	R5b-7-T4	1020942.200	1889220.300	697.9	1020942.231	1889220.438	696.643	0.031	0.138	-1.257	Point was surveyed at existing ground surface
5	R5b-7-T5	1020947.000	1889216.200	697.9	1020946.973	1889216.282	698.881	-0.027	0.082	0.981	Trinox directed to take all material as targeted
5	R5b-7-T6	1020934.700	1889206.000	697.2	1020934.794	1889205.917	697.175	0.094	-0.083	-0.025	
5	R5b-7-T7	1020938.200	1889202.400	697.2	1020938.301	1889202.357	699.210	0.101	-0.043	2.010	Trinox directed to take all material as targeted

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-7

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-7-T8	1020925.800	1889193.500	697.7	1020925.931	1889193.422	697.073	0.131	-0.078	-0.627	Point was surveyed at existing ground surface
5	R5b-7-T9	1020931.300	1889193.400	697.7	1020931.201	1889193.424	699.187	-0.099	0.024	1.487	Tronox directed to take all material as targeted

Δ Elevation > 0.5 ft Blue Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-8

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-8-8121t	1020767.100	1889102.500	GS	1020767.118	1889102.568	696.004	0.018	0.068	NA		
5	R5b-8-8164t	1020761.900	1889105.800	696.9	1020761.912	1889105.922	697.286	0.012	0.122	0.386		
5	R5b-8-8167t	1020753.800	1889093.000	GS	1020753.762	1889093.061	696.350	-0.038	0.061	NA		
5	R5b-8-8174t	1020778.900	1889114.900	GS	1020778.928	1889114.911	696.329	0.028	0.011	NA		
5	R5b-8-8191t	1020827.300	1889175.400	697.4	1020827.285	1889175.451	696.948	-0.015	0.051	-0.452	Point was surveyed at existing ground surface	
5	R5b-8-8192t	1020784.300	1889126.100	697.8	1020784.315	1889126.127	698.434	0.015	0.027	0.634	Trinox directed to take all material as targeted	
5	R5b-8-8193t	1020787.100	1889123.500	GS	1020787.051	1889123.478	696.439	-0.049	-0.022	NA		
5	R5b-8-8198t	1020805.300	1889152.100	697.0	1020805.240	1889152.068	696.779	-0.060	-0.032	-0.221		
5	R5b-8-8201t	1020812.900	1889154.600	GS	1020812.856	1889154.655	696.184	-0.044	0.055	NA		
5	R5b-8-8202t	1020816.700	1889162.900	697.1	1020816.654	1889162.905	697.006	-0.046	0.005	-0.094		
5	R5b-8-8241t	1020795.700	1889139.000	698.0	1020795.668	1889138.964	698.477	-0.032	-0.036	0.477		
5	R5b-8-8242t	1020808.600	1889149.900	GS	1020808.608	1889149.888	696.207	0.008	-0.012	NA		
5	R5b-8-8243t	1020798.000	1889137.200	GS	1020797.923	1889137.234	696.559	-0.077	0.034	NA		
5	R5b-8-8250t	1020777.500	1889116.800	695.6	1020777.472	1889116.724	696.786	-0.028	-0.076	1.186	Trinox directed to take all material as targeted	
5	R5b-8-8256t	1020837.300	1889186.500	697.7	1020837.352	1889186.502	697.870	0.052	0.002	0.170		
5	R5b-8-T1	1020832.900	1889189.700	697.7	1020832.945	1889189.657	697.882	0.045	-0.043	0.182		
5	R5b-8-T10	1020812.900	1889145.900	GS	1020812.977	1889145.909	696.365	0.077	0.009	NA		
5	R5b-8-T11	1020792.500	1889143.100	698.0	1020792.487	1889143.079	698.225	-0.013	-0.021	0.225		
5	R5b-8-T12	1020801.500	1889134.500	GS	1020801.465	1889134.543	696.392	-0.035	0.043	NA		
5	R5b-8-T13	1020781.500	1889130.000	697.8	1020781.414	1889130.020	698.578	-0.086	0.020	0.778	Trinox directed to take all material as targeted	
5	R5b-8-T14	1020770.900	1889120.800	695.6	1020770.887	1889120.826	697.632	-0.013	0.026	2.032	Trinox directed to take all material as targeted	
5	R5b-8-T15	1020790.400	1889120.800	GS	1020790.405	1889120.752	696.103	0.005	-0.048	NA		
5	R5b-8-T16	1020782.300	1889112.100	GS	1020782.277	1889112.054	696.269	-0.023	-0.046	NA		
5	R5b-8-T17	1020758.900	1889108.600	696.9	1020758.932	1889108.617	697.319	0.032	0.017	0.419		
5	R5b-8-T18	1020758.800	1889103.000	696.9	1020758.786	1889103.059	697.165	-0.014	0.059	0.265		
5	R5b-8-T19	1020769.600	1889101.300	GS	1020769.587	1889101.380	696.535	-0.013	0.080	NA		
5	R5b-8-T2	1020840.100	1889189.700	697.7	1020840.131	1889189.690	697.785	0.031	-0.010	0.085		
5	R5b-8-T20	1020753.100	1889093.800	GS	1020753.005	1889093.803	696.603	-0.095	0.003	NA		
5	R5b-8-T21	1020751.500	1889089.800	GS	1020751.573	1889089.830	696.365	0.073	0.030	NA		
5	R5b-8-T22	1020754.300	1889087.200	GS	1020754.259	1889087.186	695.874	-0.041	-0.014	NA		
5	R5b-8-T3	1020838.900	1889185.500	697.7	1020838.831	1889185.597	697.962	-0.069	0.097	0.262		
5	R5b-8-T4	1020823.200	1889179.100	697.4	1020823.211	1889179.052	697.769	0.011	-0.048	0.369		
5	R5b-8-T5	1020828.400	1889175.000	697.4	1020828.305	1889174.958	696.647	-0.095	-0.042	-0.753	Point was surveyed at existing ground surface	
5	R5b-8-T6	1020809.500	1889169.400	697.1	1020809.513	1889169.370	697.337	0.013	-0.030	0.237		
5	R5b-8-T7	1020818.300	1889161.400	697.1	1020818.277	1889161.420	696.537	-0.023	0.020	-0.563	Point was surveyed at existing ground surface	
5	R5b-8-T8	1020801.700	1889155.600	697.0	1020801.690	1889155.645	697.137	-0.010	0.045	0.137		
5	R5b-8-T9	1020816.500	1889151.100	GS	1020816.482	1889151.111	696.370	-0.018	0.011	NA		

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-9-14372t	1020754.900	1888986.500	GS	1020754.809	1888986.546	697.081	-0.091	0.046	NA		
5	R5b-9-7508t	1020758.800	1888656.500	697.4	1020758.712	1888656.447	697.722	-0.088	-0.053	0.322		
5	R5b-9-7511t	1020770.000	1888636.100	696.7	1020770.079	1888636.102	697.204	0.079	0.002	0.504	Tronox directed to take all material as targeted	
5	R5b-9-7512t	1020770.700	1888652.100	697.1	1020770.715	1888652.043	697.592	0.015	-0.057	0.492		
5	R5b-9-7517t	1020767.500	1888668.500	697.5	1020767.538	1888668.409	697.523	0.038	-0.091	0.023		
5	R5b-9-7518t	1020752.100	1888664.200	697.8	1020752.122	1888664.173	698.144	0.022	-0.027	0.344		
5	R5b-9-7519t	1020770.400	1888659.700	696.7	1020770.333	1888659.705	697.197	-0.067	0.005	0.497		
5	R5b-9-7539t	1020744.400	1888697.000	697.9	1020744.467	1888697.065	698.141	0.067	0.065	0.241		
5	R5b-9-7540t	1020748.100	1888679.700	697.8	1020748.006	1888679.780	698.162	-0.094	0.080	0.362		
5	R5b-9-7542t	1020762.100	1888701.700	697.6	1020762.122	1888701.725	697.888	0.022	0.025	0.288		
5	R5b-9-7544t	1020774.000	1888685.900	697.1	1020773.957	1888685.843	697.583	-0.043	-0.057	0.483		
5	R5b-9-7545t	1020765.300	1888684.200	697.7	1020765.226	1888684.248	698.055	-0.074	0.048	0.355		
5	R5b-9-7592t	1020758.300	1888716.200	697.7	1020758.223	1888716.251	698.166	-0.077	0.051	0.466		
5	R5b-9-7593t	1020769.300	1888702.100	697.3	1020769.255	1888702.067	697.731	-0.045	-0.033	0.431		
5	R5b-9-7594t	1020737.800	1888747.700	697.7	1020737.766	1888747.747	697.713	-0.034	0.047	0.013		
5	R5b-9-7596t	1020763.100	1888709.600	697.8	1020763.044	1888709.558	697.986	-0.056	-0.042	0.186		
5	R5b-9-7597t	1020740.200	1888711.700	697.9	1020740.232	1888711.671	698.081	0.032	-0.029	0.181		
5	R5b-9-7599t	1020744.400	1888731.100	GS	1020744.382	1888731.082	698.465	-0.018	-0.018	NA		
5	R5b-9-7602t	1020729.500	1888744.400	697.7	1020729.467	1888744.334	698.112	-0.033	-0.066	0.412		
5	R5b-9-7603t	1020736.100	1888729.800	698.0	1020736.182	1888729.733	698.014	0.082	-0.067	0.014		
5	R5b-9-7645t	1020734.400	1888762.200	GS	1020734.457	1888762.140	698.574	0.057	-0.060	NA		
5	R5b-9-7648t	1020708.000	1888821.500	698.1	1020708.015	1888821.519	698.153	0.015	0.019	0.053		
5	R5b-9-7650t	1020725.700	1888758.500	697.7	1020725.635	1888758.469	698.555	-0.065	-0.031	0.855	Tronox directed to take all material as targeted	
5	R5b-9-7653t	1020726.000	1888791.500	697.1	1020726.067	1888791.532	697.551	0.067	0.032	0.451		
5	R5b-9-7654t	1020723.600	1888775.100	697.8	1020723.621	1888775.080	698.618	0.021	-0.020	0.818	Tronox directed to take all material as targeted	
5	R5b-9-7655t	1020729.400	1888778.900	698.1	1020729.433	1888779.006	698.505	0.033	0.106	0.405		
5	R5b-9-7673t	1020723.400	1888834.500	697.6	1020723.305	1888834.547	697.977	-0.095	0.047	0.377		
5	R5b-9-7674t	1020715.500	1888833.800	697.2	1020715.441	1888833.822	697.578	-0.059	0.022	0.378		
5	R5b-9-7676t	1020723.300	1888843.100	697.7	1020723.372	1888843.194	697.811	0.072	0.094	0.111		
5	R5b-9-7680t	1020707.900	1888837.100	697.1	1020707.978	1888837.081	697.430	0.078	-0.019	0.330		
5	R5b-9-7682t	1020707.600	1888854.700	697.2	1020707.599	1888854.773	697.568	-0.001	0.073	0.368		
5	R5b-9-7684t	1020726.500	1888859.200	698.0	1020726.550	1888859.260	698.224	0.050	0.060	0.224		
5	R5b-9-7733t	1020723.700	1888905.400	698.5	1020723.742	1888905.431	698.978	0.042	0.031	0.478		
5	R5b-9-7734t	1020729.900	1888892.900	698.0	1020729.871	1888892.964	698.312	-0.029	0.064	0.312		
5	R5b-9-7736t	1020713.100	1888887.700	698.0	1020713.099	1888887.636	698.245	-0.001	-0.064	0.245		
5	R5b-9-7737t	1020727.500	1888875.900	698.2	1020727.476	1888875.990	698.576	-0.024	0.090	0.376		
5	R5b-9-7740t	1020710.600	1888870.400	698.1	1020710.655	1888870.337	698.097	0.055	-0.063	-0.003		

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-9-7779t	1020751.200	1888949.100	698.0	1020751.163	1888949.082	698.410	-0.037	-0.018	0.410			
5	R5b-9-7781t	1020726.700	1888920.500	698.1	1020726.600	1888920.480	698.258	-0.100	-0.020	0.158			
5	R5b-9-7784t	1020740.700	1888928.700	698.2	1020740.745	1888928.697	698.570	0.045	-0.003	0.370			
5	R5b-9-7785t	1020732.900	1888935.900	698.2	1020732.918	1888935.925	698.266	0.018	0.025	0.066			
5	R5b-9-7786t	1020737.500	1888945.300	698.2	1020737.443	1888945.319	698.149	-0.057	0.019	-0.051			
5	R5b-9-7790t	1020753.800	1888962.000	698.3	1020753.737	1888961.990	698.562	-0.063	-0.010	0.262			
5	R5b-9-7791t	1020743.500	1888961.500	697.1	1020743.422	1888961.439	697.560	-0.078	-0.061	0.460			
5	R5b-9-7792t	1020752.800	1888976.700	698.3	1020752.831	1888976.671	698.497	0.031	-0.029	0.197			
5	R5b-9-7842t	1020717.500	1888807.600	696.4	1020717.424	1888807.622	696.823	-0.076	0.022	0.423			
5	R5b-9-7853t	1020764.400	1888990.300	698.1	1020764.458	1888990.302	698.360	0.058	0.002	0.260			
5	R5b-9-7908t	1020717.500	1888907.000	GS	1020717.449	1888907.029	699.373	-0.051	0.029	NA			
5	R5b-9-7957t	1020761.200	1888654.100	697.4	1020761.200	1888654.100	0.000	0.000	0.000	-697.4	Data not recorded; see CAR WB-06-001		
5	R5b-9-7959t	1020734.600	1888708.800	695.6	1020734.588	1888708.889	695.846	-0.012	0.089	0.246			
5	R5b-9-7960t	1020740.500	1888694.600	696.7	1020740.545	1888694.576	697.071	0.045	-0.024	0.371			
5	R5b-9-7967t	1020720.200	1888774.400	GS	1020720.334	1888774.410	697.481	0.134	0.010	NA			
5	R5b-9-8006t	1020768.900	1888644.800	GS	1020768.908	1888644.691	696.878	0.008	-0.109	NA			
5	R5b-9-T1	1020764.700	1888992.800	698.1	1020764.609	1888992.825	698.538	-0.091	0.025	0.438			
5	R5b-9-T10	1020756.000	1888950.100	698.0	1020755.973	1888950.140	698.445	-0.027	0.040	0.445			
5	R5b-9-T11	1020736.300	1888945.600	698.2	1020736.352	1888945.545	698.003	0.052	-0.055	-0.197			
5	R5b-9-T12	1020754.700	1888941.900	698.0	1020754.785	1888941.940	698.449	0.085	0.040	0.449			
5	R5b-9-T13	1020743.000	1888939.000	698.2	1020742.927	1888939.064	698.566	-0.073	0.064	0.366			
5	R5b-9-T14	1020731.400	1888936.000	698.2	1020731.279	1888935.884	698.253	-0.121	-0.116	0.053			
5	R5b-9-T15	1020740.700	1888934.400	698.2	1020740.720	1888934.301	698.450	0.020	-0.099	0.250			
5	R5b-9-T16	1020746.500	1888923.300	698.2	1020746.584	1888923.388	698.273	0.084	0.088	0.073			
5	R5b-9-T17	1020725.000	1888921.600	698.1	1020725.076	1888921.616	698.034	0.076	0.016	-0.066			
5	R5b-9-T18	1020732.300	1888914.700	698.1	1020732.278	1888914.702	698.428	-0.022	0.002	0.328			
5	R5b-9-T19	1020722.600	1888909.800	698.5	1020722.670	1888909.762	698.788	0.070	-0.038	0.288			
5	R5b-9-T2	1020767.100	1888992.400	698.1	1020767.087	1888992.482	698.569	-0.013	0.082	0.469			
5	R5b-9-T20	1020716.200	1888907.500	GS	1020716.282	1888907.435	697.169	0.082	-0.065	NA			
5	R5b-9-T21	1020730.900	1888907.200	698.5	1020730.898	1888907.178	698.780	-0.002	-0.022	0.280			
5	R5b-9-T22	1020733.700	1888894.100	698.0	1020733.731	1888894.175	698.319	0.031	0.075	0.319			
5	R5b-9-T23	1020711.800	1888888.000	698.0	1020711.686	1888887.848	697.144	-0.114	-0.152	-0.856	Point was surveyed at existing ground surface		
5	R5b-9-T24	1020731.500	1888877.300	698.2	1020731.453	1888877.349	698.653	-0.047	0.049	0.453			
5	R5b-9-T25	1020708.800	1888870.300	698.1	1020708.859	1888870.382	697.941	0.059	0.082	-0.159			
5	R5b-9-T26	1020731.100	1888860.300	698.0	1020731.006	1888860.345	698.152	-0.094	0.045	0.152			
5	R5b-9-T27	1020705.700	1888854.900	697.2	1020705.761	1888854.992	697.507	0.061	0.092	0.307			
5	R5b-9-T28	1020726.100	1888847.500	697.7	1020726.189	1888847.439	697.923	0.089	-0.061	0.223			

Δ Elevation > 0.5 ft Blue

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-9-T29	1020706.400	1888837.200	697.1	1020706.418	1888837.138	697.427	0.018	-0.062	0.327			
5	R5b-9-T3	1020768.200	1888989.700	698.1	1020768.153	1888989.777	698.522	-0.047	0.077	0.422			
5	R5b-9-T30	1020727.800	1888835.000	697.6	1020727.867	1888834.984	697.750	0.067	-0.016	0.150			
5	R5b-9-T31	1020724.300	1888830.800	697.6	1020724.308	1888830.847	697.802	0.008	0.047	0.202			
5	R5b-9-T32	1020716.200	1888828.900	697.2	1020716.261	1888828.864	697.672	0.061	-0.036	0.472			
5	R5b-9-T33	1020712.400	1888822.700	698.1	1020712.443	1888822.746	698.425	0.043	0.046	0.325			
5	R5b-9-T34	1020706.800	1888821.500	698.1	1020706.752	1888821.494	698.172	-0.048	-0.006	0.072			
5	R5b-9-T35	1020705.800	1888813.100	698.1	1020705.760	1888813.140	698.448	-0.040	0.040	0.348			
5	R5b-9-T36	1020721.800	1888809.000	696.4	1020721.784	1888809.063	696.720	-0.016	0.063	0.320			
5	R5b-9-T37	1020710.600	1888806.100	696.4	1020710.647	1888806.046	696.705	0.047	-0.054	0.305			
5	R5b-9-T38	1020727.100	1888791.800	697.1	1020727.105	1888791.768	697.558	0.005	-0.032	0.458			
5	R5b-9-T39	1020721.800	1888790.700	697.1	1020721.873	1888790.676	697.588	0.073	-0.024	0.488			
5	R5b-9-T4	1020758.000	1888989.100	GS	1020757.906	1888989.187	696.964	-0.094	0.087	NA			
5	R5b-9-T40	1020729.500	1888782.400	698.1	1020729.500	1888782.308	698.200	0.000	-0.092	0.100			
5	R5b-9-T41	1020723.900	1888780.700	697.8	1020723.886	1888780.743	698.241	-0.014	0.043	0.441			
5	R5b-9-T42	1020734.100	1888779.600	698.1	1020734.127	1888779.581	698.273	0.027	-0.019	0.173			
5	R5b-9-T43	1020719.300	1888778.500	GS	1020719.218	1888778.468	697.469	-0.082	-0.032	NA			
5	R5b-9-T44	1020714.800	1888772.600	GS	1020714.836	1888772.524	697.346	0.036	-0.076	NA			
5	R5b-9-T45	1020719.700	1888769.500	GS	1020719.549	1888769.535	698.052	-0.151	0.035	NA			
5	R5b-9-T46	1020738.600	1888764.400	GS	1020738.589	1888764.445	698.752	-0.011	0.045	NA			
5	R5b-9-T47	1020723.400	1888758.100	697.7	1020723.363	1888758.013	698.576	-0.037	-0.087	0.876	Tronox directed to take all material as targeted		
5	R5b-9-T48	1020742.800	1888748.400	697.7	1020742.831	1888748.358	697.797	0.031	-0.042	0.097			
5	R5b-9-T49	1020728.300	1888743.500	697.7	1020728.258	1888743.546	697.775	-0.042	0.046	0.075			
5	R5b-9-T5	1020752.200	1888987.900	GS	1020752.203	1888987.831	696.692	0.003	-0.069	NA			
5	R5b-9-T50	1020734.300	1888729.400	698.0	1020734.354	1888729.310	698.105	0.054	-0.090	0.105			
5	R5b-9-T51	1020749.800	1888728.000	GS	1020749.865	1888727.897	698.468	0.065	-0.103	NA			
5	R5b-9-T52	1020761.000	1888717.300	697.7	1020761.058	1888717.217	697.860	0.058	-0.083	0.160			
5	R5b-9-T53	1020733.900	1888713.600	695.6	1020733.925	1888713.686	696.004	0.025	0.086	0.404			
5	R5b-9-T54	1020767.100	1888710.400	697.8	1020767.042	1888710.341	697.923	-0.058	-0.059	0.123			
5	R5b-9-T55	1020731.200	1888708.000	695.6	1020731.247	1888707.952	695.803	0.047	-0.048	0.203			
5	R5b-9-T56	1020774.300	1888703.400	697.3	1020774.252	1888703.299	698.983	-0.048	-0.101	1.683	Tronox directed to take all material as targeted		
5	R5b-9-T57	1020737.300	1888694.400	696.7	1020737.330	1888694.427	697.062	0.030	0.027	0.362			
5	R5b-9-T58	1020778.000	1888686.600	697.1	1020777.990	1888686.580	697.378	-0.010	-0.020	0.278			
5	R5b-9-T59	1020745.500	1888679.400	697.8	1020745.479	1888679.319	697.735	-0.021	-0.081	-0.065			
5	R5b-9-T6	1020751.200	1888976.600	698.3	1020751.153	1888976.690	697.985	-0.047	0.090	-0.315	Point was surveyed at existing ground surface		
5	R5b-9-T60	1020772.000	1888670.200	697.5	1020771.921	1888670.226	697.486	-0.079	0.026	-0.014			
5	R5b-9-T61	1020750.300	1888663.400	697.8	1020750.289	1888663.413	697.832	-0.011	0.013	0.032			

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-9-T62	1020774.700	1888661.500	696.7	1020774.700	1888661.590	697.192	0.000	0.090	0.492		
5	R5b-9-T63	1020774.000	1888652.800	697.1	1020774.038	1888652.788	697.500	0.038	-0.012	0.400		
5	R5b-9-T64	1020759.300	1888652.400	697.4	1020759.335	1888652.352	696.905	0.035	-0.048	-0.495	Point was surveyed at existing ground surface	
5	R5b-9-T65	1020766.800	1888645.100	GS	1020766.841	1888645.026	696.684	0.041	-0.074	NA		
5	R5b-9-T66	1020774.200	1888637.500	696.7	1020774.207	1888637.625	697.674	0.007	0.125	0.974	Tronox directed to take all material as targeted	
5	R5b-9-T67	1020767.600	1888635.700	696.7	1020767.683	1888635.740	697.045	0.083	0.040	0.345		
5	R5b-9-T68	1020770.000	1888631.900	696.7	1020769.944	1888631.889	697.275	-0.056	-0.011	0.575	Tronox directed to take all material as targeted	
5	R5b-9-T69	1020774.200	1888631.700	696.7	1020774.216	1888631.723	698.006	0.016	0.023	1.306	Tronox directed to take all material as targeted	
5	R5b-9-T7	1020757.600	1888976.000	698.3	1020757.667	1888975.902	698.677	0.067	-0.098	0.377		
5	R5b-9-T8	1020756.600	1888963.400	698.3	1020756.578	1888963.385	698.901	-0.022	-0.015	0.601	Tronox directed to take all material as targeted	
5	R5b-9-T9	1020742.000	1888961.300	697.1	1020742.079	1888961.307	697.504	0.079	0.007	0.404		

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-10

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-10-5902t	1020586.700	1888431.400	698.0	1020586.649	1888431.367	698.574	-0.051	-0.033	0.574	Trinox directed to take all material as targeted	
5	R5b-10-5903t	1020597.400	1888442.500	GS	1020597.488	1888442.479	697.976	0.088	-0.021	NA		
5	R5b-10-5904t	1020607.100	1888456.500	GS	1020607.124	1888456.494	697.656	0.024	-0.006	NA		
5	R5b-10-5905t	1020620.100	1888467.300	GS	1020620.095	1888467.232	697.153	-0.005	-0.068	NA		
5	R5b-10-5907t	1020551.100	1888381.900	698.3	1020551.172	1888381.862	699.123	0.072	-0.038	0.823	Trinox directed to take all material as targeted	
5	R5b-10-5908t	1020560.300	1888392.600	697.9	1020560.318	1888392.663	698.868	0.018	0.063	0.968	Trinox directed to take all material as targeted	
5	R5b-10-5909t	1020570.800	1888402.400	GS	1020570.822	1888402.480	697.954	0.022	0.080	NA		
5	R5b-10-5910t	1020581.400	1888413.900	GS	1020581.390	1888413.844	698.345	-0.010	-0.056	NA		
5	R5b-10-5964t	1020612.900	1888452.200	GS	1020612.798	1888452.115	696.748	-0.102	-0.085	NA		
5	R5b-10-5970t	1020668.800	1888536.300	GS	1020668.844	1888536.243	698.753	0.044	-0.057	NA		
5	R5b-10-5974t	1020660.600	1888522.100	697.6	1020660.682	1888522.109	698.874	0.082	0.009	1.274	Trinox directed to take all material as targeted	
5	R5b-10-5977t	1020651.800	1888509.200	GS	1020651.853	1888509.199	698.301	0.053	-0.001	NA		
5	R5b-10-5981t	1020640.400	1888494.800	GS	1020640.456	1888494.801	698.841	0.056	0.001	NA		
5	R5b-10-5989t	1020635.300	1888487.200	697.9	1020635.272	1888487.275	698.472	-0.028	0.075	0.572	Trinox directed to take all material as targeted	
5	R5b-10-5993t	1020634.700	1888478.200	697.6	1020634.728	1888478.240	698.248	0.028	0.040	0.648	Trinox directed to take all material as targeted	
5	R5b-10-6001t	1020566.300	1888385.900	696.6	1020566.370	1888385.920	697.595	0.070	0.020	0.995	Trinox directed to take all material as targeted	
5	R5b-10-6048t	1020592.100	1888408.700	GS	1020592.198	1888408.597	696.472	0.098	-0.103	NA		
5	R5b-10-6051t	1020591.900	1888427.500	GS	1020591.872	1888427.546	697.358	-0.028	0.046	NA		
5	R5b-10-6056t	1020630.000	1888485.500	697.9	1020630.109	1888485.492	698.602	0.109	-0.008	0.702	Trinox directed to take all material as targeted	
5	R5b-10-6081t	1020570.900	1888390.900	696.5	1020570.963	1888390.848	697.776	0.063	-0.052	1.276	Trinox directed to take all material as targeted	
5	R5b-10-T1	1020668.800	1888540.100	GS	1020668.776	1888540.053	698.987	-0.024	-0.047	NA		
5	R5b-10-T10	1020632.200	1888490.200	697.9	1020632.248	1888490.228	698.516	0.048	0.028	0.616	Trinox directed to take all material as targeted	
5	R5b-10-T11	1020626.700	1888486.900	697.9	1020626.697	1888486.820	698.708	-0.003	-0.080	0.808	Trinox directed to take all material as targeted	
5	R5b-10-T12	1020637.400	1888485.000	697.9	1020637.402	1888484.923	698.696	0.002	-0.077	0.796	Trinox directed to take all material as targeted	
5	R5b-10-T13	1020635.700	1888475.900	697.6	1020635.726	1888475.992	696.665	0.026	0.092	-0.935	Point was surveyed at existing ground surface	
5	R5b-10-T14	1020617.700	1888470.900	GS	1020617.667	1888470.823	698.217	-0.033	-0.077	NA		
5	R5b-10-T15	1020622.300	1888465.600	GS	1020622.291	1888465.652	696.949	-0.009	0.052	NA		
5	R5b-10-T16	1020604.600	1888459.300	GS	1020604.689	1888459.310	698.290	0.089	0.010	NA		
5	R5b-10-T17	1020614.400	1888449.900	GS	1020614.312	1888449.866	696.652	-0.088	-0.034	NA		
5	R5b-10-T18	1020594.800	1888445.500	GS	1020594.701	1888445.535	698.399	-0.099	0.035	NA		
5	R5b-10-T19	1020600.200	1888441.000	GS	1020600.189	1888441.047	697.325	-0.011	0.047	NA		
5	R5b-10-T2	1020665.600	1888537.500	GS	1020665.794	1888537.444	699.088	0.194	-0.056	NA		
5	R5b-10-T20	1020584.200	1888434.000	698.0	1020584.078	1888434.017	698.905	-0.122	0.017	0.905	Trinox directed to take all material as targeted	
5	R5b-10-T21	1020597.500	1888433.500	GS	1020597.351	1888433.556	696.951	-0.149	0.056	NA		
5	R5b-10-T22	1020597.000	1888424.000	GS	1020597.059	1888423.959	696.570	0.059	-0.041	NA		
5	R5b-10-T23	1020578.200	1888417.300	GS	1020578.251	1888417.233	698.361	0.051	-0.067	NA		
5	R5b-10-T24	1020595.200	1888407.500	GS	1020595.220	1888407.631	696.328	0.020	0.131	NA		

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-10

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-10-T25	1020566.800	1888405.600	GS	1020566.796	1888405.617	698.890	-0.004	0.017	NA			
5	R5b-10-T26	1020579.300	1888405.600	GS	1020579.292	1888405.617	698.555	-0.008	0.017	NA			
5	R5b-10-T27	1020584.600	1888402.900	GS	1020584.676	1888402.952	698.771	0.076	0.052	NA			
5	R5b-10-T28	1020574.000	1888399.800	GS	1020573.984	1888399.808	697.363	-0.016	0.008	NA			
5	R5b-10-T29	1020556.700	1888395.200	697.9	1020556.670	1888395.245	699.023	-0.030	0.045	1.123	Tronox directed to take all material as targeted		
5	R5b-10-T3	1020670.800	1888536.000	GS	1020670.767	1888536.042	698.640	-0.033	0.042	NA			
5	R5b-10-T30	1020577.200	1888391.500	696.5	1020577.276	1888391.555	698.572	0.076	0.055	2.072	Tronox directed to take all material as targeted		
5	R5b-10-T31	1020547.400	1888385.100	698.3	1020547.434	1888385.036	699.102	0.034	-0.064	0.802	Same as R4-7-T112		
5	R5b-10-T32	1020568.500	1888382.000	696.6	1020568.482	1888381.910	698.127	-0.018	-0.090	1.527	Tronox directed to take all material as targeted		
5	R5b-10-T33	1020555.900	1888380.200	698.3	1020555.949	1888380.174	698.301	0.049	-0.026	0.001	Same as R4-7-T115		
5	R5b-10-T4	1020656.600	1888524.800	697.6	1020656.681	1888524.874	698.727	0.081	0.074	1.127	Tronox directed to take all material as targeted		
5	R5b-10-T5	1020663.800	1888519.300	697.6	1020663.925	1888519.243	698.258	0.125	-0.057	0.658	Tronox directed to take all material as targeted		
5	R5b-10-T6	1020647.400	1888511.300	GS	1020647.415	1888511.278	698.788	0.015	-0.022	NA			
5	R5b-10-T7	1020657.600	1888508.100	GS	1020657.688	1888508.001	698.932	0.088	-0.099	NA			
5	R5b-10-T8	1020636.400	1888497.300	GS	1020636.368	1888497.248	698.731	-0.032	-0.052	NA			
5	R5b-10-T9	1020642.900	1888492.300	GS	1020642.914	1888492.188	698.941	0.014	-0.112	NA			

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-11

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-11-5961t	1020609.500	1888436.100	GS	1020609.455	1888436.080	696.387	-0.045	-0.020	NA			
5	R5b-11-T1	1020610.900	1888439.200	GS	1020610.898	1888439.148	696.597	-0.002	-0.052	NA			
5	R5b-11-T2	1020606.200	1888437.800	GS	1020606.196	1888437.874	696.414	-0.004	0.074	NA			
5	R5b-11-T3	1020613.100	1888433.700	GS	1020613.000	1888433.684	696.349	-0.100	-0.016	NA			
5	R5b-11-T4	1020607.800	1888432.500	GS	1020607.831	1888432.483	696.282	0.031	-0.017	NA			

Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS

Bottom of Overburden

Reach 5b-12

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-12-7330t	1020638.800	1888341.000	697.1	1020638.834	1888341.078	697.065	0.034	0.078	-0.035		
5	R5b-12-7334t	1020613.100	1888291.000	698.0	1020613.122	1888290.910	698.670	0.022	-0.090	0.670	Trinox directed to take all material as targeted	
5	R5b-12-7335t	1020630.600	1888326.400	697.0	1020630.613	1888326.489	696.774	0.013	0.089	-0.226		
5	R5b-12-7339t	1020616.300	1888296.900	697.7	1020616.265	1888296.914	698.228	-0.035	0.014	0.528	Trinox directed to take all material as targeted	
5	R5b-12-7342t	1020625.100	1888311.500	697.2	1020625.089	1888311.557	697.898	-0.011	0.057	0.698	Trinox directed to take all material as targeted	
5	R5b-12-7391t	1020655.000	1888399.600	697.8	1020655.021	1888399.641	697.807	0.021	0.041	0.007		
5	R5b-12-7393t	1020649.200	1888385.100	696.1	1020649.209	1888385.074	697.883	0.009	-0.026	1.783	Trinox directed to take all material as targeted	
5	R5b-12-7396t	1020646.900	1888371.900	697.4	1020646.894	1888371.819	698.466	-0.006	-0.081	1.066	Trinox directed to take all material as targeted	
5	R5b-12-7399t	1020644.700	1888357.800	697.9	1020644.818	1888357.852	698.370	0.118	0.052	0.470	Trinox directed to take all material as targeted	
5	R5b-12-T1	1020657.100	1888403.400	697.8	1020657.029	1888403.369	698.247	-0.071	-0.031	0.447		
5	R5b-12-T10	1020637.400	1888342.200	697.1	1020637.446	1888342.303	696.792	0.046	0.103	-0.308	Point was surveyed at existing ground surface	
5	R5b-12-T11	1020642.800	1888340.100	697.1	1020642.798	1888340.038	698.448	-0.002	-0.062	1.348	Trinox directed to take all material as targeted	
5	R5b-12-T12	1020629.500	1888327.200	697.0	1020629.487	1888327.234	696.481	-0.013	0.034	-0.519	Point was surveyed at existing ground surface	
5	R5b-12-T13	1020636.700	1888325.700	697.0	1020636.645	1888325.711	698.466	-0.055	0.011	1.466	Trinox directed to take all material as targeted	
5	R5b-12-T14	1020623.800	1888311.900	697.2	1020623.720	1888311.874	696.646	-0.080	-0.026	-0.554	Point was surveyed at existing ground surface	
5	R5b-12-T15	1020628.900	1888310.000	697.2	1020628.946	1888309.992	698.651	0.046	-0.008	1.451	Trinox directed to take all material as targeted	
5	R5b-12-T16	1020615.800	1888298.100	697.7	1020615.889	1888298.127	696.563	0.089	0.027	-1.137	Point was surveyed at existing ground surface	
5	R5b-12-T17	1020620.500	1888296.400	697.7	1020620.584	1888296.381	698.879	0.084	-0.019	1.179	Trinox directed to take all material as targeted	
5	R5b-12-T18	1020612.400	1888292.000	698.0	1020612.388	1888291.969	698.207	-0.012	-0.031	0.207		
5	R5b-12-T19	1020617.100	1888288.100	698.0	1020616.962	1888288.134	698.798	-0.138	0.034	0.798	Trinox directed to take all material as targeted	
5	R5b-12-T2	1020653.700	1888399.700	697.8	1020653.754	1888399.715	696.457	0.054	0.015	-1.343	Point was surveyed at existing ground surface	
5	R5b-12-T20	1020611.900	1888287.200	698.0	1020611.945	1888287.198	698.896	0.045	-0.002	0.896	Trinox directed to take all material as targeted	
5	R5b-12-T3	1020658.100	1888397.900	697.8	1020658.092	1888397.965	698.285	-0.008	0.065	0.485		
5	R5b-12-T4	1020648.300	1888385.900	696.1	1020648.345	1888385.907	696.336	0.045	0.007	0.236		
5	R5b-12-T5	1020654.100	1888384.100	696.1	1020654.094	1888384.120	698.625	-0.006	0.020	2.525	Trinox directed to take all material as targeted	
5	R5b-12-T6	1020644.700	1888372.300	697.4	1020644.761	1888372.273	697.998	0.061	-0.027	0.598	Trinox directed to take all material as targeted	
5	R5b-12-T7	1020650.600	1888370.500	697.4	1020650.589	1888370.468	698.619	-0.011	-0.032	1.219	Trinox directed to take all material as targeted	
5	R5b-12-T8	1020643.200	1888358.900	697.9	1020643.241	1888358.811	698.289	0.041	-0.089	0.389		
5	R5b-12-T9	1020647.300	1888356.600	697.9	1020647.288	1888356.602	698.422	-0.012	0.002	0.522	Trinox directed to take all material as targeted	

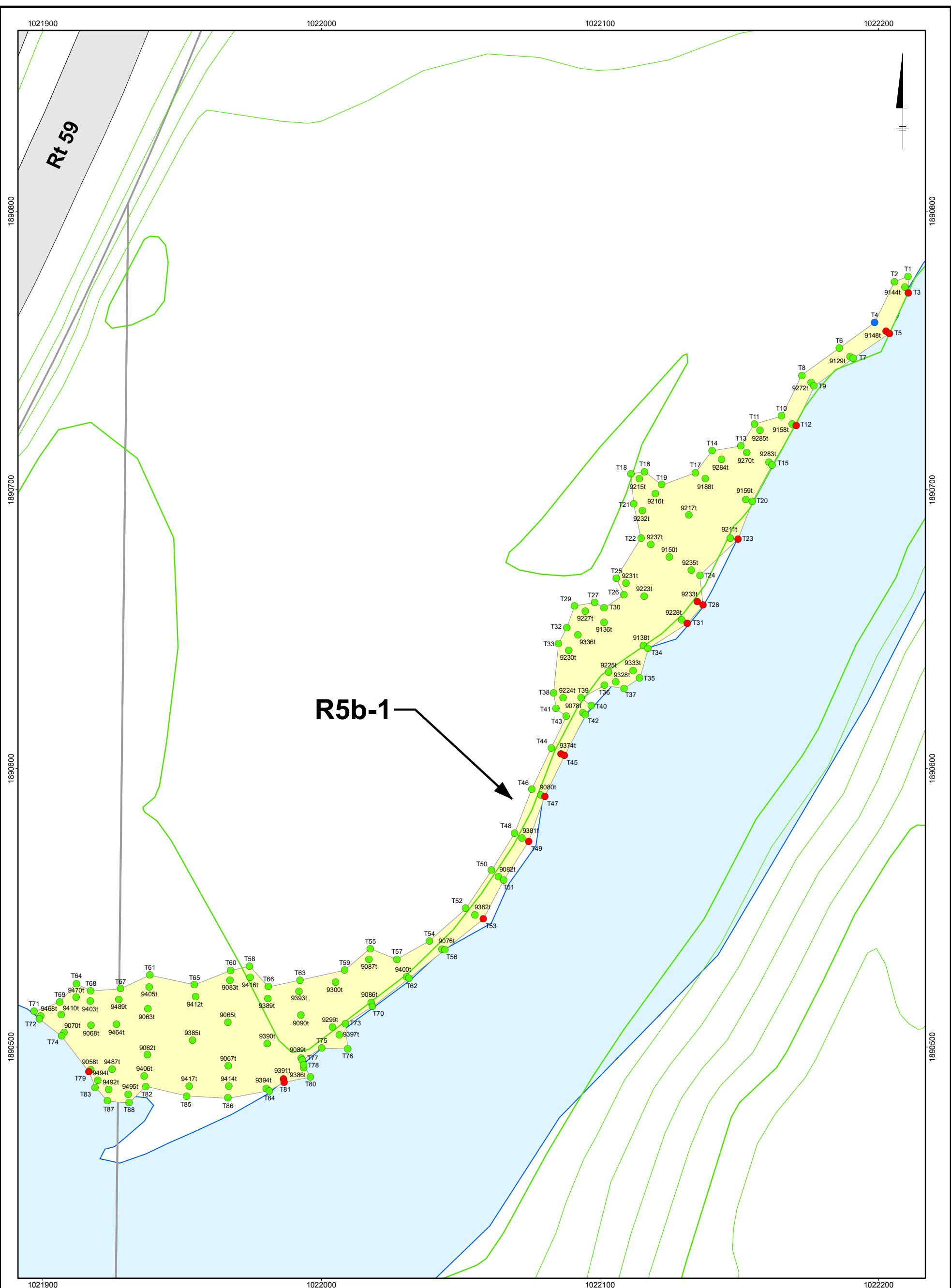
Δ Elevation > 0.5 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation 0.5 to -0.25 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation < -0.25 ft Red


LEGEND:

- 10 FOOT TOPOGRAPHIC CONTOUR
- 2 FOOT TOPOGRAPHIC CONTOUR
- PROPERTY LINE

0 25 50 Feet

SURVEY LOCATION:

- LOCATION NOT SURVEYED

**ELEVATION DIFFERENCE
(ACTUAL VS DESIGN)**

- > 0.5 Ft
- 0.5 to -0.25 Ft
- < -0.25 Ft

NOTE:
1. COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
DATUM: NAD 83
UNITS: FEET

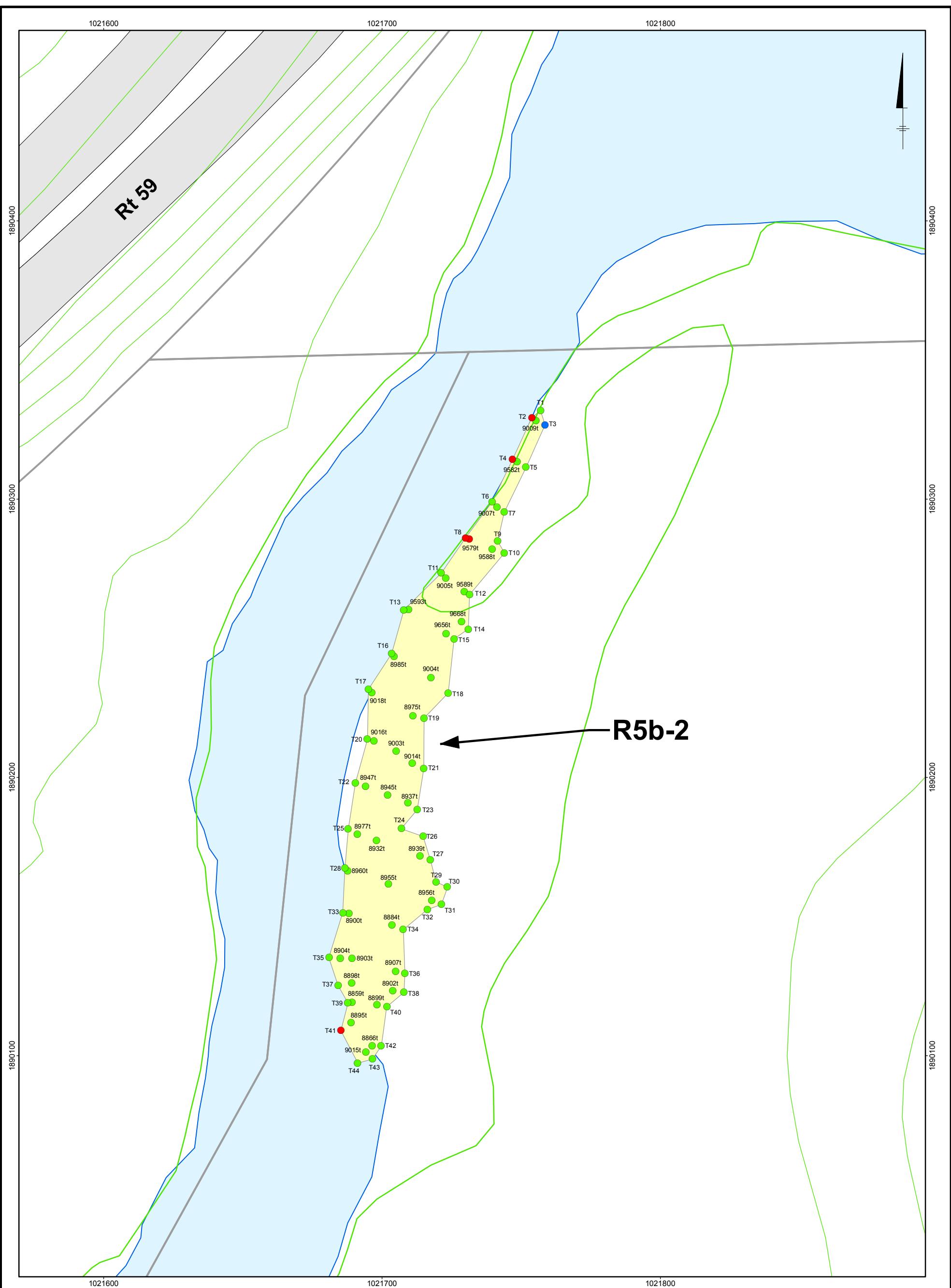
DATE: 11/02/2006

PREPARED BY: Jerry Krane

TRONOX, LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF OVERBURDEN
REACH 5b
(Figures Numbered North to South)

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction

**FIGURE
1 of 7**



LEGEND:

- 10 FOOT TOPOGRAPHIC CONTOUR
- 2 FOOT TOPOGRAPHIC CONTOUR
- PROPERTY LINE

0 25 50 Feet

DATE: 11/02/2006

PREPARED BY: Jerry Krane

SURVEY LOCATION:

- LOCATION NOT SURVEYED

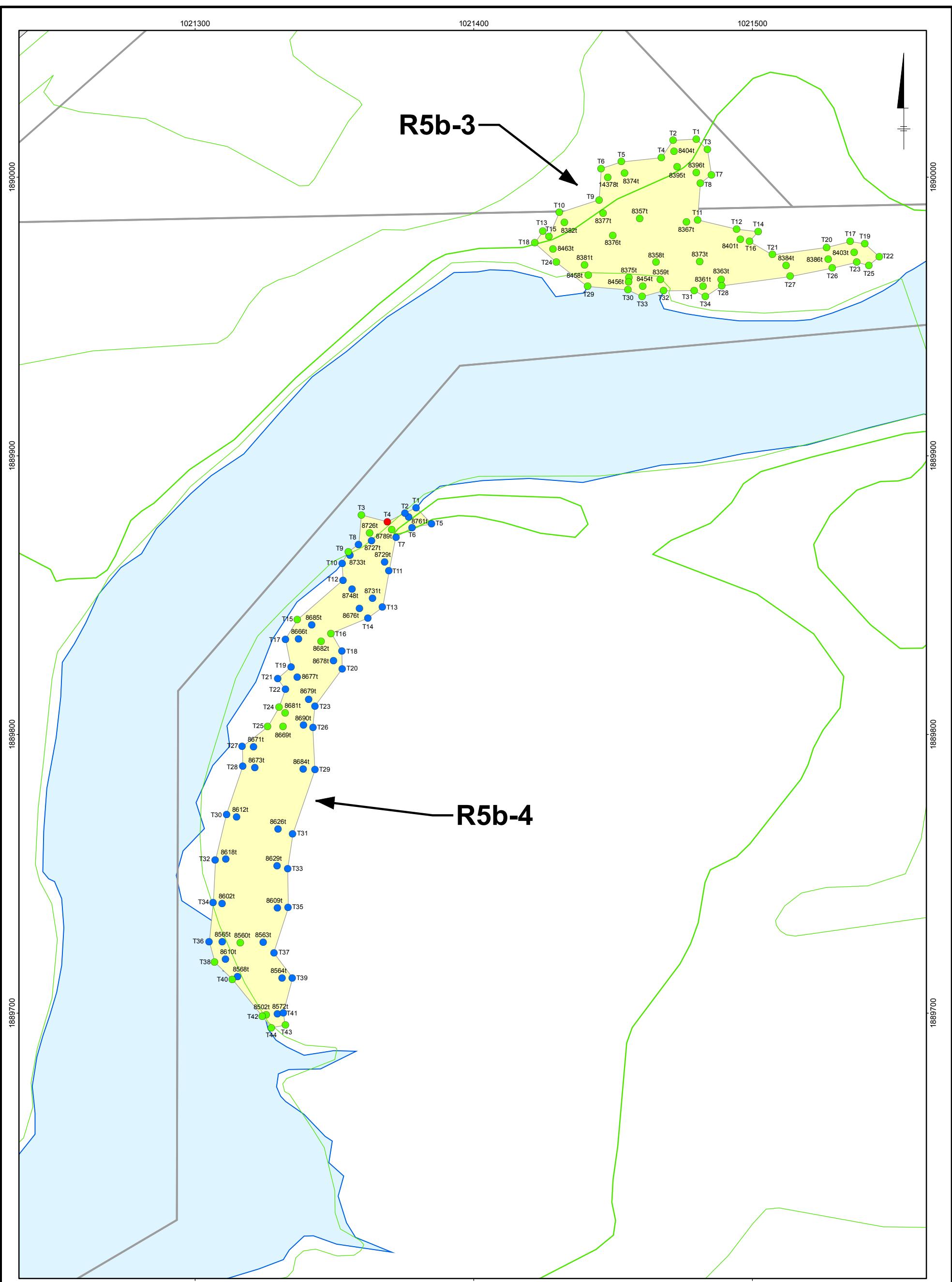
ELEVATION DIFFERENCE (ACTUAL VS DESIGN)

- > 0.5 Ft
- 0.5 to -0.25 Ft
- < -0.25 Ft

NOTE:

1. COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
DATUM: NAD 83
UNITS: FEET

TRONOX, LLC KRESS CREEK/WEST BRANCH DUPAGE RIVER REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS BOTTOM OF OVERBURDEN REACH 5b <small>(Figures Numbered North to South)</small>
 BBL <small>ENVIRONMENTAL SERVICES, INC. Remedial Management & Construction</small>

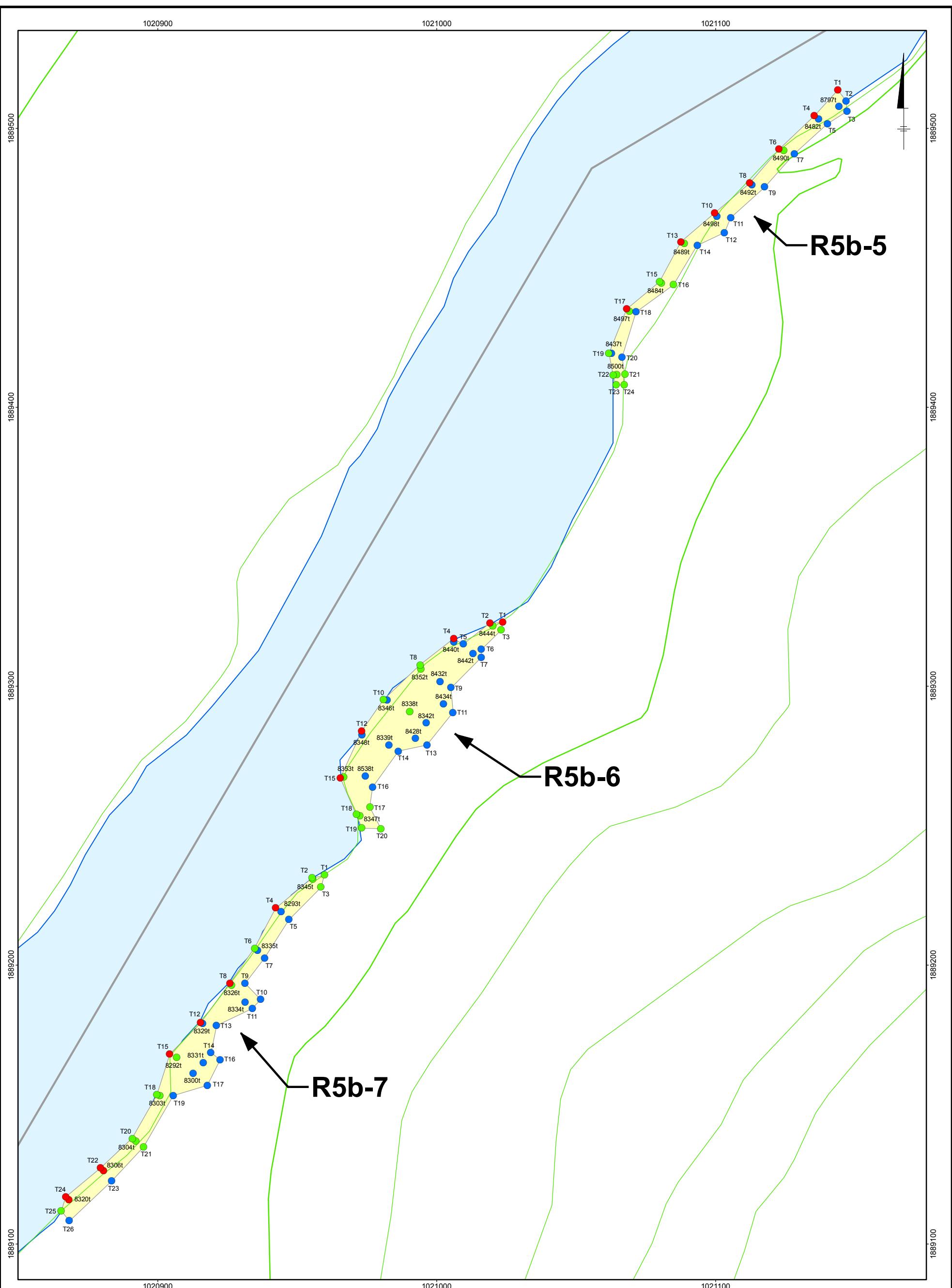


NOTE:

1. COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
DATUM: NAD 83
UNITS: FEET

TRONOX, LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF OVERBURDEN
REACH 5b
(Figures Numbered North to South)

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction



LEGEND:

- 10 FOOT TOPOGRAPHIC CONTOUR
- 2 FOOT TOPOGRAPHIC CONTOUR
- PROPERTY LINE

0 25 50 Feet

DATE: 11/02/2006

PREPARED BY: Jerry Krane

SURVEY LOCATION:

- LOCATION NOT SURVEYED

ELEVATION DIFFERENCE (ACTUAL VS DESIGN)

- > 0.5 Ft
- 0.5 to -0.25 Ft
- < -0.25 Ft

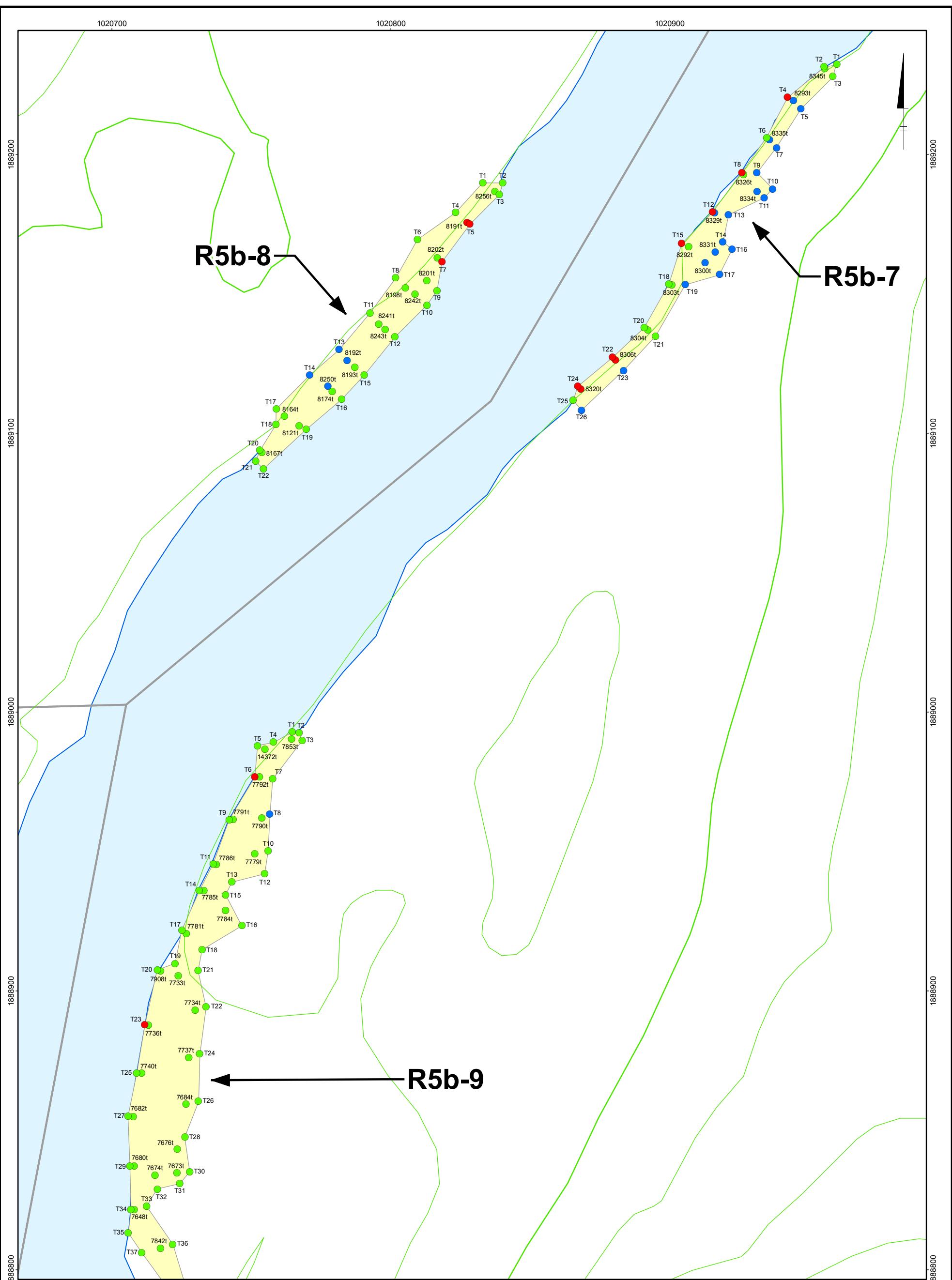
NOTE:

- COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
DATUM: NAD 83
UNITS: FEET

TRONOX, LLC	
KRESS CREEK/WEST BRANCH DUPAGE RIVER	
REMEDIATION TRACKING SYSTEM	
GPS VERIFICATION POINTS	
BOTTOM OF OVERBURDEN	
REACH 5b	
(Figures Numbered North to South)	

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction

**FIGURE
4 of 7**



LEGEND:

- 10 FOOT TOPOGRAPHIC CONTOUR
- 2 FOOT TOPOGRAPHIC CONTOUR
- PROPERTY LINE

0 25 50 Feet

DATE: 11/02/2006

PREPARED BY: Jerry Krane

SURVEY LOCATION:

- LOCATION NOT SURVEYED

ELEVATION DIFFERENCE (ACTUAL VS DESIGN)

- > 0.5 Ft
- 0.5 to -0.25 Ft
- < -0.25 Ft

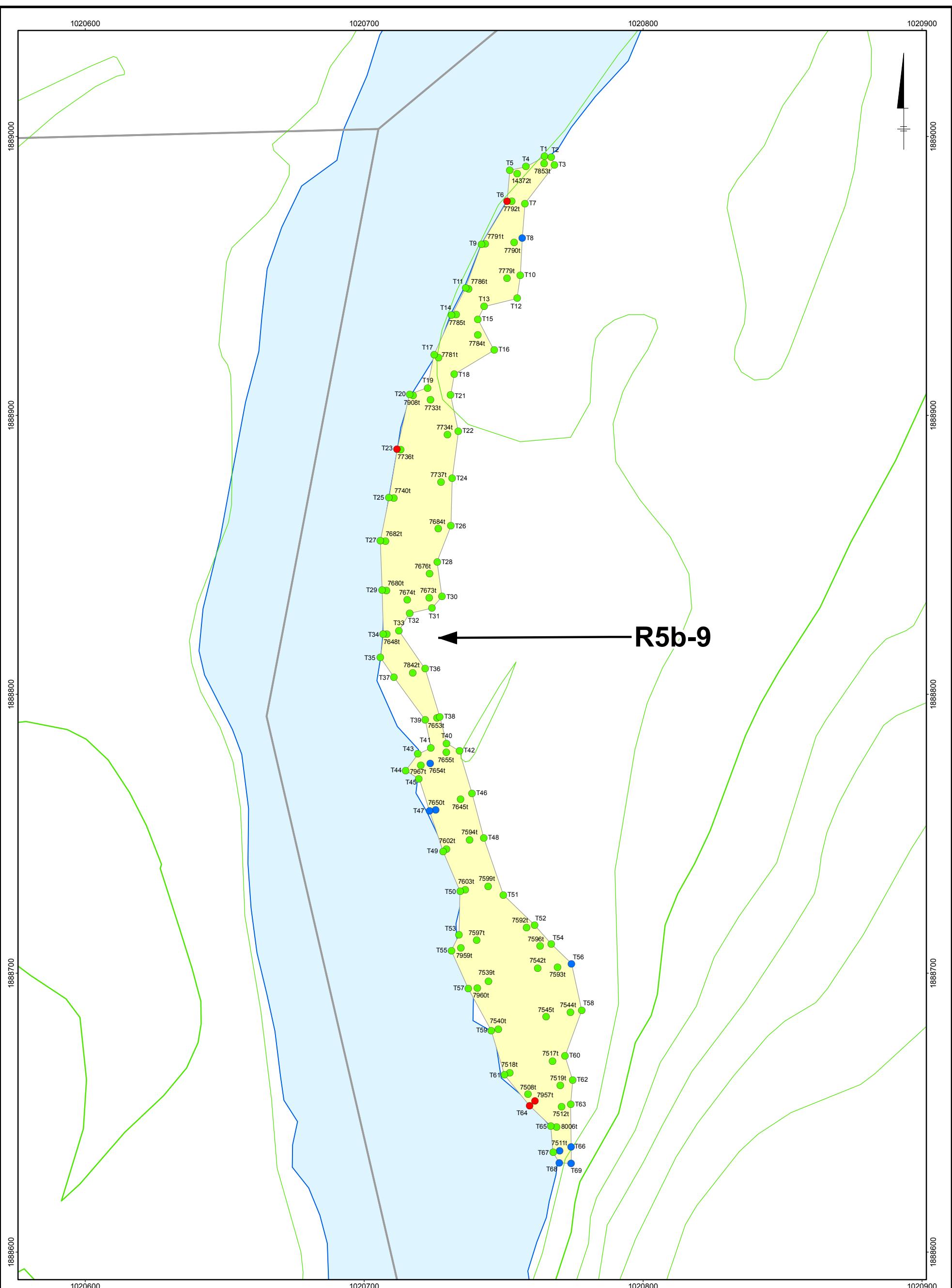
NOTE:

- COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
DATUM: NAD 83
UNITS: FEET

TRONOX, LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF OVERBURDEN
REACH 5b
(Figures Numbered North to South)

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction

FIGURE
5 of 7



LEGEND:

- 10 FOOT TOPOGRAPHIC CONTOUR
- 2 FOOT TOPOGRAPHIC CONTOUR
- PROPERTY LINE

0 25 50 Feet

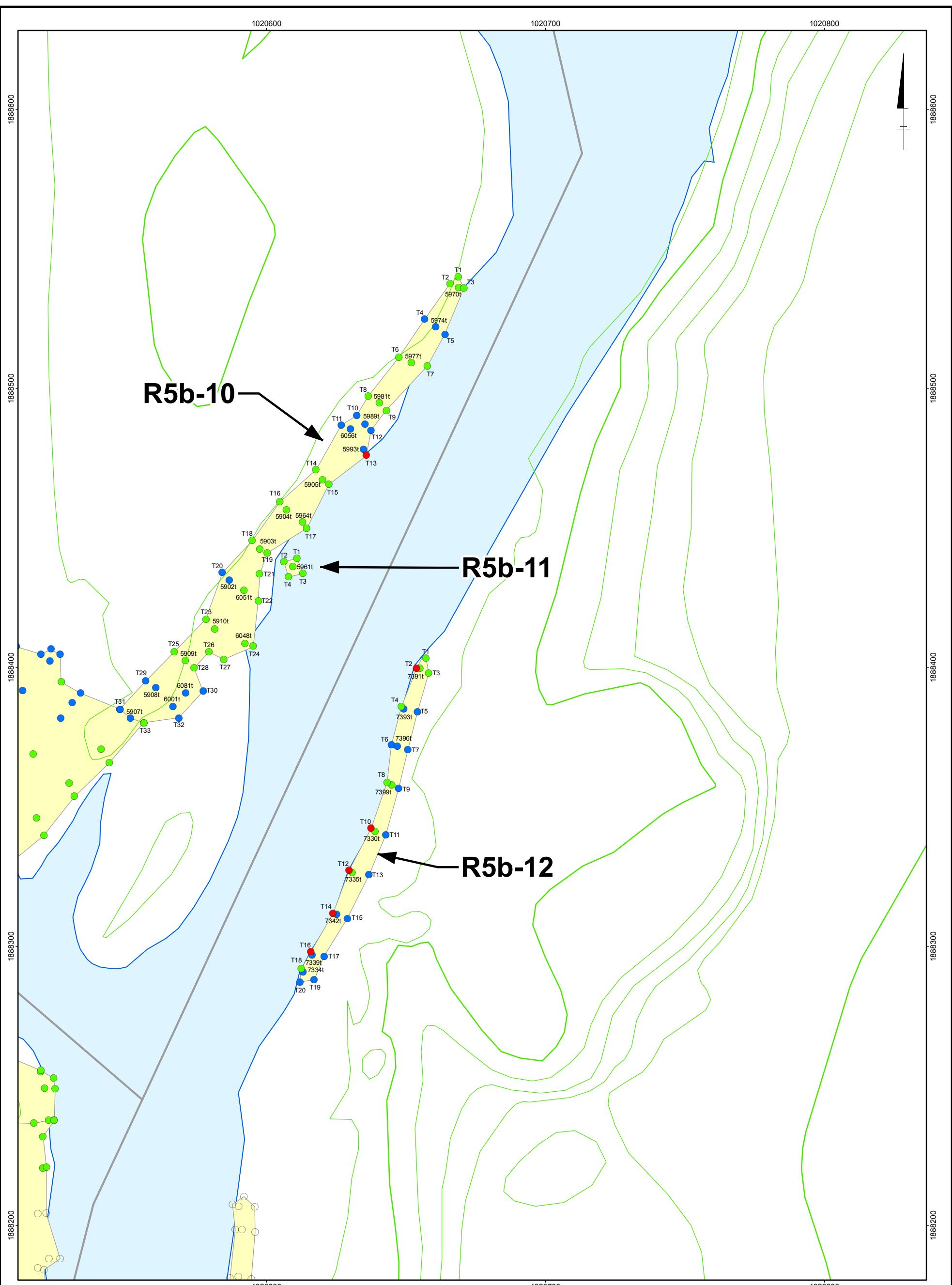
DATE: 11/02/2006

PREPARED BY: Jerry Krane

SURVEY LOCATION:
 ○ LOCATION NOT SURVEYED
ELEVATION DIFFERENCE (ACTUAL VS DESIGN)
 ● > 0.5 Ft
 ● 0.5 to -0.25 Ft
 ● < -0.25 Ft

NOTE:
 1. COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
 DATUM: NAD 83
 UNITS: FEET

TRONOX, LLC KRESS CREEK/WEST BRANCH DUPAGE RIVER REMEDIATION TRACKING SYSTEM	
GPS VERIFICATION POINTS BOTTOM OF OVERBURDEN REACH 5b (Figures Numbered North to South)	
BBL <small>ENVIRONMENTAL SERVICES, INC.</small> <small>Remedial Management & Construction</small>	



NOTE:
 1. COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
 DATUM: NAD 83
 UNITS: FEET

TRONOX, LLC
 KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF OVERBURDEN
REACH 5b
 (Figures Numbered North to South)



Appendix D

Notification of Successful GPS
Verification Survey for the Bottoms of
Targeted Material, Reach 5B – All
Sections (R5B-1 through R5B-12)



ENVIRONMENTAL SERVICES, INC.

 an ARCADIS company

Transmitted Via Hand Delivery/E-Mail

KC 092

November 3, 2006

*MK
11-3-06*

Mr. Mark Krippel
Tronox LLC
800 Weyrauch Street
West Chicago, IL 60185

Re: Notification of Successful GPS Verification Survey
For the Bottom of Targeted Material
Reach 5B – All Sections
Remedial Action at the Kress Creek/West Branch DuPage River Project, West Chicago, IL
BBLES Project #: 71020.001

Dear Mark:

In accordance with Section 2.1.5.2 “Notification” in the Reach 5B Final Design/Remedial Action (FD/RA) Work Plan for the above referenced project, BBL Environmental Services, Inc. (BBLES) is pleased to notify Tronox LLC, the USEPA RPM/OSC and the Local Communities’ Representative that a successful GPS Verification Survey was performed for the Bottom of Targeted Material for the excavations for the entirety of **Reach 5B** at the Kress Creek/West Branch DuPage River Remedial Action Project in West Chicago (DuPage County), Illinois at the time and date noted below:

1. This GPS Verification Survey Package issued on November 3, 2006 includes in its entirety the Reach 5B targeted material points achieved and documented in accordance with the Work Plan. These GPS verification points for bottom of targeted material were previously distributed by a series of e-mails entitled “Kress Creek/West Branch, Reach 5B: GPS points achieved” from July 19, 2006 through September 13, 2006.

Excavation Locations: Reach 5B: Sections R5B-1 through R5B-12.

Date of Verification: November 3, 2006
Time of Verification: 1:00 PM CST

In accordance with Section 2.1.5.1 “Concurrent Verification” of the Reach 5B FD/RA Work Plan, BBLES sent an e-mail each Friday with a weekly schedule for the following week that listed the projected locations and dates where excavations and GPS verification surveys would be performed. BBLES sent those weekly schedule e-mails to Rebecca Frey and Scott Hansen of USEPA, Richard Allen, Kelly Grahn and Steve Shafer of IEMA/DNS

C:\Documents and Settings\mfs\My Documents\Kerr-McGee Kress Creek\Reach 5B\GPS verification survey packages\Reach 5B, Bottom of targeted matl, 11-03-06.doc
K-M File # KC 4.1-6-1

800 Weyrauch Street • West Chicago, Illinois 60185
Tel (630) 293-7695 • Fax (630) 293-7719 • www.bbl-inc.com • Offices Nationwide

GPS Verification Survey – Bottom of Targeted Material
Reach 5B Completed
November 3, 2006
Page 2 of 3

and John Wills of CBB West providing them the required 24 hour notice that the excavations and GPS verification surveys for the bottom of targeted material in the above listed areas would be completed during those weeks.

The attached Excel file prepared by ProSource Technologies, Inc. (ProSource) includes a separate table entitled "Kress Creek/ West Branch DuPage River Verification Points, Bottom of Targeted Material" for each of the 12 sections that comprise Reach 5B, and the tables list the design, actual and difference of the survey coordinates and elevations of the verification points in each section.

The attached "PDF" file prepared by ProSource includes seven (7) separate pdf figures numbered 1 of 7, 2 of 7, etc., and the figures are numbered from north to south. The figures present collectively a map of the excavation locations of the twelve sections that comprise Reach 5B, and denote the location of each of the verification points that have been verified.

The verification points listed in these attachments have been achieved and backfilling in the specified excavation locations has proceeded in accordance with the prior preliminary verbal approval of these points based on the field monitoring of the regulators' representatives. Documents pertaining to this survey are available for inspection at the BBLES/Sevenson construction office at Tronox's REF Facility.

Sincerely,

BBL ENVIRONMENTAL SERVICES, INC.



Michael F. Savage, P.E.
Senior Engineer II

MFS/mfs

Enclosures

cc: Michael Logan, Tronox
Frank Schultz, Tronox
Jeffery Williams, Tronox
Rebecca Frey, USEPA
Scott Hansen, USEPA
Richard Allen, IEMA
Kelly Grahn, IEMA
Steve Shafer, REM/IEMA
Pat Kelsey, CBB West
Kristine Meyer, CBB West
Matt Scheffler, CBB West
John Wills, CBB West
Mark Gravelding, BBLES

C:\Documents and Settings\mfs\My Documents\Kerr-McGee Kress Creek\Reach 5B\GPS verification survey packages\Reach 5B, Bottom of targeted matl, 11-03-06.doc
K-M File # KC 4.1-6-1

BBL ENVIRONMENTAL SERVICES, INC.

an **ARCADIS** company

David Jedlicka, BBLES
Joseph Molina, BBLES
Heather Vandewalker, BBLES
Jeff Walker, BBLES
Michael Crystal, Sevenson
Rick Elia, Jr., Sevenson
Ricky Moss, Sevenson
Mark Schmitt, Sevenson
Wade Carlson, ProSource
Jerry Krane, ProSource

C:\Documents and Settings\mfs\My Documents\Kerr-McGee Kress Creek\Reach 5B\GPS verification survey packages\Reach 5B, Bottom of targeted matl, 11-03-06.doc
K-M File # KC 4.1-6-1

BBL ENVIRONMENTAL SERVICES, INC.
an **ARCADIS** company

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-1-9058b	1021917.300	1890491.800	698.1	1021917.341	1890491.869	698.054	0.041	0.069	-0.046			
5	R5b-1-9062b	1021937.400	1890497.100	697.1	1021937.430	1890497.132	696.919	0.030	0.032	-0.181			
5	R5b-1-9063b	1021937.700	1890513.600	699.2	1021937.737	1890513.556	699.156	0.037	-0.044	-0.044			
5	R5b-1-9065b	1021966.500	1890508.900	699	1021966.516	1890508.940	698.975	0.016	0.040	-0.025			
5	R5b-1-9067b	1021966.600	1890493.200	698	1021966.601	1890493.182	697.986	0.001	-0.018	-0.014			
5	R5b-1-9068b	1021917.300	1890507.800	698.4	1021917.381	1890507.836	698.272	0.081	0.036	-0.128			
5	R5b-1-9070b	1021907.600	1890505.000	698.2	1021907.666	1890505.045	698.150	0.066	0.045	-0.050			
5	R5b-1-9076b	1022043.400	1890535.100	699.9	1022043.351	1890535.116	699.852	-0.049	0.016	-0.048			
5	R5b-1-9078b	1022093.900	1890619.900	699.3	1022093.865	1890619.980	699.233	-0.035	0.080	-0.067			
5	R5b-1-9080b	1022078.800	1890590.500	699.5	1022078.781	1890590.533	699.337	-0.019	0.033	-0.163			
5	R5b-1-9082b	1022063.700	1890561.000	700.7	1022063.782	1890560.996	700.655	0.082	-0.004	-0.045			
5	R5b-1-9083b	1021967.200	1890523.900	699	1021967.240	1890523.805	698.966	0.040	-0.095	-0.034			
5	R5b-1-9086b	1022018.000	1890516.000	698.7	1022018.004	1890516.033	698.698	0.004	0.033	-0.002			
5	R5b-1-9087b	1022017.100	1890531.400	699.4	1022017.195	1890531.270	699.293	0.095	-0.130	-0.107			
5	R5b-1-9089b	1021992.800	1890496.100	697.7	1021992.779	1890496.176	697.509	-0.021	0.076	-0.191			
5	R5b-1-9090b	1021992.700	1890511.500	699.1	1021992.685	1890511.479	699.077	-0.015	-0.021	-0.023			
5	R5b-1-9129b	1022189.800	1890747.900	699.2	1022189.818	1890747.852	699.165	0.018	-0.048	-0.035			
5	R5b-1-9136b	1022101.500	1890652.300	698.2	1022101.567	1890652.287	697.765	0.067	-0.013	-0.435	Isolated over excavation of Targeted Material		
5	R5b-1-9138b	1022115.500	1890644.100	698.5	1022115.543	1890644.012	698.291	0.043	-0.088	-0.209			
5	R5b-1-9144b	1022209.500	1890772.600	700.4	1022209.544	1890772.484	700.242	0.044	-0.116	-0.158			
5	R5b-1-9148b	1022202.700	1890757.000	698.8	1022202.725	1890757.075	698.704	0.025	0.075	-0.096			
5	R5b-1-9150b	1022124.800	1890675.900	698.8	1022124.771	1890675.908	698.587	-0.029	0.008	-0.213			
5	R5b-1-9158b	1022169.100	1890723.600	700.3	1022169.122	1890723.700	700.076	0.022	0.100	-0.224			
5	R5b-1-9159b	1022152.400	1890696.600	699.4	1022152.362	1890696.637	699.387	-0.038	0.037	-0.013			
5	R5b-1-9188b	1022137.700	1890703.900	699.9	1022137.677	1890703.949	699.800	-0.023	0.049	-0.100			
5	R5b-1-9211b	1022146.900	1890682.700	698.8	1022146.939	1890682.685	698.799	0.039	-0.015	-0.001			
5	R5b-1-9215b	1022114.200	1890704.000	700.1	1022114.098	1890704.022	699.892	-0.102	0.022	-0.208			
5	R5b-1-9216b	1022119.900	1890698.500	700.2	1022119.886	1890698.551	700.007	-0.014	0.051	-0.193			
5	R5b-1-9217b	1022132.000	1890690.900	698.8	1022131.997	1890690.826	698.621	-0.003	-0.074	-0.179			
5	R5b-1-9223b	1022116.000	1890661.800	698.1	1022115.984	1890661.822	698.061	-0.016	0.022	-0.039			
5	R5b-1-9224b	1022086.800	1890625.300	700.2	1022086.888	1890625.222	700.041	0.088	-0.078	-0.159			
5	R5b-1-9225b	1022103.200	1890634.400	698.3	1022103.118	1890634.405	698.247	-0.082	0.005	-0.053			
5	R5b-1-9227b	1022094.800	1890656.400	699.5	1022094.832	1890656.301	699.377	0.032	-0.099	-0.123			
5	R5b-1-9228b	1022129.400	1890653.300	698.7	1022129.350	1890653.272	698.539	-0.050	-0.028	-0.161			
5	R5b-1-9230b	1022088.800	1890642.200	699.4	1022088.761	1890642.271	699.242	-0.039	0.071	-0.158			
5	R5b-1-9231b	1022109.300	1890666.400	698.9	1022109.285	1890666.350	698.726	-0.015	-0.050	-0.174			
5	R5b-1-9232b	1022115.300	1890692.400	698.6	1022115.349	1890692.464	698.400	0.049	0.064	-0.200			

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-1-9233b	1022134.900	1890660.000	699.1	1022134.796	1890659.970	698.874	-0.104	-0.030	-0.226			
5	R5b-1-9235b	1022132.800	1890671.200	698.8	1022132.810	1890671.134	698.707	0.010	-0.066	-0.093			
5	R5b-1-9237b	1022118.200	1890680.300	699.9	1022118.199	1890680.334	699.701	-0.001	0.034	-0.199			
5	R5b-1-9270b	1022152.700	1890713.300	700.1	1022152.734	1890713.221	700.060	0.034	-0.079	-0.040			
5	R5b-1-9272b	1022175.900	1890738.400	700.4	1022175.893	1890738.470	700.213	-0.007	0.070	-0.187			
5	R5b-1-9283b	1022160.800	1890709.800	700.2	1022160.754	1890709.736	699.977	-0.046	-0.064	-0.223			
5	R5b-1-9284b	1022143.700	1890711.000	699.9	1022143.701	1890710.984	699.715	0.001	-0.016	-0.185			
5	R5b-1-9285b	1022157.400	1890721.300	700.3	1022157.343	1890721.333	700.295	-0.057	0.033	-0.005			
5	R5b-1-9299b	1022004.000	1890507.200	699	1022003.994	1890507.229	698.830	-0.006	0.029	-0.170			
5	R5b-1-9300b	1022005.100	1890523.200	698.9	1022005.045	1890523.164	698.810	-0.055	-0.036	-0.090			
5	R5b-1-9328b	1022105.800	1890631.000	697.9	1022105.791	1890631.045	697.881	-0.009	0.045	-0.019			
5	R5b-1-9333b	1022112.000	1890635.000	697.8	1022111.882	1890634.949	697.751	-0.118	-0.051	-0.049			
5	R5b-1-9336b	1022092.200	1890648.000	699.5	1022092.158	1890647.980	699.312	-0.042	-0.020	-0.188			
5	R5b-1-9362b	1022055.100	1890547.200	700.4	1022055.067	1890547.250	700.295	-0.033	0.050	-0.105			
5	R5b-1-9374b	1022086.100	1890605.100	699	1022086.149	1890604.980	698.981	0.049	-0.120	-0.019			
5	R5b-1-9381b	1022072.000	1890574.900	700.2	1022071.933	1890574.730	700.165	-0.067	-0.170	-0.035			
5	R5b-1-9385b	1021953.900	1890502.500	698.3	1021953.815	1890502.429	698.237	-0.085	-0.071	-0.063			
5	R5b-1-9386b	1021993.600	1890492.500	697.5	1021993.680	1890492.460	697.275	0.080	-0.040	-0.225			
5	R5b-1-9389b	1021980.800	1890517.300	698.9	1021980.786	1890517.231	698.873	-0.014	-0.069	-0.027			
5	R5b-1-9390b	1021980.600	1890501.300	699.2	1021980.614	1890501.350	699.195	0.014	0.050	-0.005			
5	R5b-1-9391b	1021986.400	1890488.400	699.5	1021986.441	1890488.460	699.309	0.041	0.060	-0.191			
5	R5b-1-9393b	1021992.000	1890520.100	699	1021991.984	1890520.159	698.992	-0.016	0.059	-0.008			
5	R5b-1-9394b	1021980.300	1890485.100	698	1021980.343	1890485.074	697.880	0.043	-0.026	-0.120			
5	R5b-1-9397b	1022006.500	1890504.400	698.7	1022006.488	1890504.362	698.604	-0.012	-0.038	-0.096			
5	R5b-1-9400b	1022030.600	1890525.200	699.8	1022030.691	1890525.230	699.742	0.091	0.030	-0.058			
5	R5b-1-9403b	1021917.200	1890516.400	698.7	1021917.236	1890516.419	698.653	0.036	0.019	-0.047			
5	R5b-1-9405b	1021938.100	1890521.400	699.2	1021938.221	1890521.402	698.988	0.121	0.002	-0.212			
5	R5b-1-9406b	1021936.500	1890489.600	697.8	1021936.438	1890489.498	697.638	-0.062	-0.102	-0.162			
5	R5b-1-9410b	1021906.700	1890511.500	698.2	1021906.720	1890511.549	698.170	0.020	0.049	-0.030			
5	R5b-1-9412b	1021954.800	1890518.000	699.2	1021954.756	1890517.909	699.079	-0.044	-0.091	-0.121			
5	R5b-1-9414b	1021966.800	1890485.900	697.9	1021966.889	1890485.843	697.874	0.089	-0.057	-0.026			
5	R5b-1-9416b	1021974.500	1890524.900	698.7	1021974.421	1890524.911	698.654	-0.079	0.011	-0.046			
5	R5b-1-9417b	1021952.500	1890485.900	697.4	1021952.484	1890485.901	697.254	-0.016	0.001	-0.146			
5	R5b-1-9464b	1021926.400	1890508.000	698.9	1021926.363	1890507.954	698.794	-0.037	-0.046	-0.106			
5	R5b-1-9468b	1021899.400	1890511.000	698.1	1021899.461	1890511.011	697.914	0.061	0.011	-0.186			
5	R5b-1-9470b	1021911.900	1890517.700	698.7	1021911.905	1890517.740	698.585	0.005	0.040	-0.115			
5	R5b-1-9487b	1021924.900	1890492.000	697.8	1021924.860	1890491.960	697.732	-0.040	-0.040	-0.068			

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-1-9489b	1021927.300	1890516.900	699	1021927.290	1890516.860	698.863	-0.010	-0.040	-0.137			
5	R5b-1-9492b	1021923.600	1890484.700	697.7	1021923.645	1890484.760	697.495	0.045	0.060	-0.205			
5	R5b-1-9494b	1021919.800	1890488.100	697.8	1021919.805	1890488.105	697.726	0.005	0.005	-0.074			
5	R5b-1-9495b	1021930.800	1890483.000	697.2	1021930.759	1890482.886	697.159	-0.041	-0.114	-0.041			
5	R5b-1-B1	1022210.700	1890776.700	700.4	1022210.700	1890776.748	700.170	0.000	0.048	-0.230			
5	R5b-1-B10	1022165.200	1890726.500	700.3	1022165.222	1890726.500	700.208	0.022	0.000	-0.092			
5	R5b-1-B11	1022155.400	1890723.600	700.3	1022155.385	1890723.541	700.237	-0.015	-0.059	-0.063			
5	R5b-1-B12	1022170.400	1890723.200	700.3	1022170.426	1890723.165	699.407	0.026	-0.035	-0.893	Point was surveyed at existing ground surface		
5	R5b-1-B13	1022150.600	1890715.700	700.1	1022150.665	1890715.678	699.905	0.065	-0.022	-0.195			
5	R5b-1-B14	1022140.200	1890714.000	699.9	1022140.231	1890713.969	699.794	0.031	-0.031	-0.106			
5	R5b-1-B15	1022161.800	1890709.000	700.2	1022161.836	1890708.898	699.173	0.036	-0.102	-1.027	Point was surveyed at existing ground surface		
5	R5b-1-B16	1022116.000	1890706.600	700.1	1022116.072	1890706.546	699.966	0.072	-0.054	-0.134			
5	R5b-1-B17	1022134.300	1890706.100	699.9	1022134.290	1890706.129	699.832	-0.010	0.029	-0.068			
5	R5b-1-B18	1022111.100	1890705.700	700.1	1022111.148	1890705.597	699.910	0.048	-0.103	-0.190			
5	R5b-1-B19	1022122.200	1890701.700	700.2	1022122.228	1890701.631	700.153	0.028	-0.069	-0.047			
5	R5b-1-B2	1022205.700	1890774.700	700.4	1022205.705	1890774.734	700.231	0.005	0.034	-0.169			
5	R5b-1-B20	1022154.800	1890695.900	699.4	1022154.871	1890695.817	698.902	0.071	-0.083	-0.498	Point was surveyed at existing ground surface		
5	R5b-1-B21	1022112.100	1890694.800	698.6	1022112.032	1890694.803	698.441	-0.068	0.003	-0.159			
5	R5b-1-B22	1022114.700	1890682.700	699.9	1022114.752	1890682.684	699.848	0.052	-0.016	-0.052			
5	R5b-1-B23	1022149.600	1890682.300	698.8	1022149.544	1890682.287	698.611	-0.056	-0.013	-0.189			
5	R5b-1-B24	1022135.800	1890669.200	698.8	1022135.819	1890669.185	698.722	0.019	-0.015	-0.078			
5	R5b-1-B25	1022105.800	1890668.200	698.9	1022105.769	1890668.187	698.876	-0.031	-0.013	-0.024			
5	R5b-1-B26	1022108.700	1890662.300	698.9	1022108.744	1890662.297	698.675	0.044	-0.003	-0.225			
5	R5b-1-B27	1022098.100	1890659.600	699.5	1022098.029	1890659.645	699.341	-0.071	0.045	-0.159			
5	R5b-1-B28	1022137.000	1890658.500	699.1	1022136.966	1890658.412	698.665	-0.034	-0.088	-0.435	Point was surveyed at existing ground surface		
5	R5b-1-B29	1022090.900	1890658.300	699.5	1022090.891	1890658.380	699.487	-0.009	0.080	-0.013			
5	R5b-1-B3	1022210.700	1890770.700	700.4	1022210.699	1890770.576	699.763	-0.001	-0.124	-0.637	Point was surveyed at existing ground surface		
5	R5b-1-B30	1022101.500	1890657.600	698.2	1022101.483	1890657.548	698.053	-0.017	-0.052	-0.147			
5	R5b-1-B31	1022131.400	1890652.000	698.7	1022131.274	1890651.949	698.633	-0.126	-0.051	-0.067			
5	R5b-1-B32	1022088.100	1890650.600	699.5	1022088.203	1890650.593	699.419	0.103	-0.007	-0.081			
5	R5b-1-B33	1022085.100	1890644.800	699.4	1022085.068	1890644.770	699.251	-0.032	-0.030	-0.149			
5	R5b-1-B34	1022117.300	1890643.000	698.5	1022117.325	1890642.970	698.311	0.025	-0.030	-0.189			
5	R5b-1-B35	1022114.300	1890632.500	697.8	1022114.207	1890632.417	697.767	-0.093	-0.083	-0.033			
5	R5b-1-B36	1022101.600	1890629.800	697.9	1022101.666	1890629.812	697.811	0.066	0.012	-0.089			
5	R5b-1-B37	1022108.600	1890628.700	697.9	1022108.616	1890628.709	697.742	0.016	0.009	-0.158			
5	R5b-1-B38	1022083.400	1890627.000	700.2	1022083.385	1890627.023	700.165	-0.015	0.023	-0.035			
5	R5b-1-B39	1022093.300	1890625.200	699.3	1022093.258	1890625.277	699.281	-0.042	0.077	-0.019			

Δ Elevation < -0.25 ft Blue

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Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-1-B4	1022198.600	1890760.000	698.8	1022198.513	1890759.930	698.788	-0.087	-0.070	-0.012		
5	R5b-1-B40	1022096.900	1890622.500	699.3	1022096.903	1890622.424	699.272	0.003	-0.076	-0.028		
5	R5b-1-B41	1022084.300	1890621.400	700.2	1022084.293	1890621.535	699.997	-0.007	0.135	-0.203		
5	R5b-1-B42	1022094.900	1890619.300	699.3	1022094.800	1890619.261	698.999	-0.100	-0.039	-0.301	Point was surveyed at existing ground surface	
5	R5b-1-B43	1022087.900	1890618.700	699.3	1022087.918	1890618.698	699.235	0.018	-0.002	-0.065		
5	R5b-1-B44	1022082.500	1890607.200	699	1022082.505	1890607.087	698.811	0.005	-0.113	-0.189		
5	R5b-1-B45	1022087.300	1890604.700	699	1022087.203	1890604.672	698.897	-0.097	-0.028	-0.103		
5	R5b-1-B46	1022075.500	1890592.500	699.5	1022075.511	1890592.524	699.466	0.011	0.024	-0.034		
5	R5b-1-B47	1022080.100	1890589.900	699.5	1022080.195	1890589.899	699.283	0.095	-0.001	-0.217		
5	R5b-1-B48	1022069.300	1890576.700	700.2	1022069.307	1890576.674	700.047	0.007	-0.026	-0.153		
5	R5b-1-B49	1022074.400	1890573.700	700.2	1022074.358	1890573.670	699.151	-0.042	-0.030	-1.049	Point was surveyed at existing ground surface	
5	R5b-1-B5	1022203.900	1890756.100	698.8	1022203.947	1890756.091	698.753	0.047	-0.009	-0.047		
5	R5b-1-B50	1022061.100	1890563.400	700.7	1022061.171	1890563.467	700.545	0.071	0.067	-0.155		
5	R5b-1-B51	1022065.500	1890559.900	700.7	1022065.493	1890559.983	699.450	-0.007	0.083	-1.250	Point was surveyed at existing ground surface	
5	R5b-1-B52	1022051.800	1890549.600	700.4	1022051.795	1890549.624	700.253	-0.005	0.024	-0.147		
5	R5b-1-B53	1022058.100	1890545.900	700.4	1022058.149	1890545.858	698.875	0.049	-0.042	-1.525	Point was surveyed at existing ground surface	
5	R5b-1-B54	1022038.800	1890538.100	699.9	1022038.812	1890538.126	699.879	0.012	0.026	-0.021		
5	R5b-1-B55	1022017.400	1890535.300	699.4	1022017.353	1890535.394	699.253	-0.047	0.094	-0.147		
5	R5b-1-B56	1022044.300	1890534.900	699.9	1022044.298	1890534.909	699.848	-0.002	0.009	-0.052		
5	R5b-1-B57	1022027.000	1890531.500	699.8	1022026.941	1890531.410	699.671	-0.059	-0.090	-0.129		
5	R5b-1-B58	1021974.300	1890529.000	698.7	1021974.331	1890528.963	698.681	0.031	-0.037	-0.019		
5	R5b-1-B59	1022008.300	1890527.600	698.9	1022008.269	1890527.537	698.848	-0.031	-0.063	-0.052		
5	R5b-1-B6	1022185.900	1890750.900	699.2	1022186.023	1890750.869	699.193	0.123	-0.031	-0.007		
5	R5b-1-B60	1021967.400	1890527.500	699	1021967.318	1890527.488	698.992	-0.082	-0.012	-0.008		
5	R5b-1-B61	1021938.400	1890525.800	699.2	1021938.413	1890525.733	699.027	0.013	-0.067	-0.173		
5	R5b-1-B62	1022031.500	1890524.600	699.8	1022031.485	1890524.699	699.679	-0.015	0.099	-0.121		
5	R5b-1-B63	1021992.300	1890524.000	699	1021992.351	1890524.032	698.764	0.051	0.032	-0.236		
5	R5b-1-B64	1021912.000	1890522.800	698.7	1021911.987	1890522.701	698.416	-0.013	-0.099	-0.284	Isolated over excavation of Targeted Material	
5	R5b-1-B65	1021954.400	1890522.300	699.2	1021954.370	1890522.155	698.982	-0.030	-0.145	-0.218		
5	R5b-1-B66	1021981.000	1890521.600	698.9	1021980.931	1890521.637	698.897	-0.069	0.037	-0.003		
5	R5b-1-B67	1021927.900	1890520.900	699	1021927.820	1890520.919	698.733	-0.080	0.019	-0.267	Isolated over excavation of Targeted Material	
5	R5b-1-B68	1021917.200	1890520.100	698.7	1021917.152	1890520.119	698.578	-0.048	0.019	-0.122		
5	R5b-1-B69	1021906.100	1890516.100	698.2	1021906.118	1890516.144	698.112	0.018	0.044	-0.088		
5	R5b-1-B7	1022190.900	1890747.300	699.2	1022190.956	1890747.384	699.178	0.056	0.084	-0.022		
5	R5b-1-B70	1022018.400	1890514.600	698.7	1022018.420	1890514.516	698.685	0.020	-0.084	-0.015		
5	R5b-1-B71	1021896.900	1890512.700	698.1	1021896.881	1890512.700	697.913	-0.019	0.000	-0.187		
5	R5b-1-B72	1021898.800	1890510.000	698.1	1021898.801	1890509.986	697.886	0.001	-0.014	-0.214		

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-1

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-1-B73	1022008.700	1890508.300	698.7	1022008.591	1890508.262	698.682	-0.109	-0.038	-0.018			
5	R5b-1-B74	1021906.700	1890504.000	698.2	1021906.748	1890504.039	698.138	0.048	0.039	-0.062			
5	R5b-1-B75	1022000.100	1890499.500	698.7	1022000.049	1890499.547	698.499	-0.051	0.047	-0.201			
5	R5b-1-B76	1022009.400	1890499.300	698.7	1022009.496	1890499.341	698.649	0.096	0.041	-0.051			
5	R5b-1-B77	1021993.200	1890495.300	697.7	1021993.253	1890495.260	697.507	0.053	-0.040	-0.193			
5	R5b-1-B78	1021993.600	1890493.500	697.5	1021993.612	1890493.550	697.337	0.012	0.050	-0.163			
5	R5b-1-B79	1021916.500	1890491.100	698.1	1021916.497	1890491.027	698.071	-0.003	-0.073	-0.029			
5	R5b-1-B8	1022172.400	1890741.100	700.4	1022172.351	1890741.017	700.199	-0.049	-0.083	-0.201			
5	R5b-1-B80	1021996.200	1890489.200	697.5	1021996.102	1890489.203	697.451	-0.098	0.003	-0.049			
5	R5b-1-B81	1021986.700	1890487.300	699.5	1021986.672	1890487.363	698.672	-0.028	0.063	-0.828	Point was surveyed at existing ground surface		
5	R5b-1-B82	1021937.000	1890485.900	697.8	1021937.051	1890485.843	697.594	0.051	-0.057	-0.206			
5	R5b-1-B83	1021918.900	1890485.500	697.8	1021918.926	1890485.437	697.637	0.026	-0.063	-0.163			
5	R5b-1-B84	1021981.300	1890484.300	698	1021981.349	1890484.329	697.946	0.049	0.029	-0.054			
5	R5b-1-B85	1021951.600	1890482.400	697.4	1021951.613	1890482.361	697.391	0.013	-0.039	-0.009			
5	R5b-1-B86	1021966.400	1890481.600	697.9	1021966.431	1890481.643	697.838	0.031	0.043	-0.062			
5	R5b-1-B87	1021923.300	1890480.600	697.7	1021923.288	1890480.646	697.609	-0.012	0.046	-0.091			
5	R5b-1-B88	1021931.000	1890479.900	697.2	1021930.930	1890479.842	697.078	-0.070	-0.058	-0.122			
5	R5b-1-B9	1022176.900	1890737.300	700.4	1022176.915	1890737.358	700.269	0.015	0.058	-0.131			

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-2

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-2-8859b	1021689.100	1890119.200	697.3	1021689.136	1890119.293	697.171	0.036	0.093	-0.129			
5	R5b-2-8866b	1021696.300	1890103.600	697.5	1021696.201	1890103.614	697.433	-0.099	0.014	-0.067			
5	R5b-2-8884b	1021703.400	1890146.900	697.9	1021703.413	1890146.830	697.821	0.013	-0.070	-0.079			
5	R5b-2-8895b	1021689.000	1890111.800	698.6	1021689.030	1890111.871	697.653	0.030	0.071	-0.947	Point was surveyed at existing ground surface		
5	R5b-2-8898b	1021689.000	1890125.900	699.6	1021689.016	1890125.935	698.396	0.016	0.035	-1.204	Point was surveyed at existing ground surface		
5	R5b-2-8899b	1021698.200	1890118.300	697.6	1021698.247	1890118.261	697.540	0.047	-0.039	-0.060			
5	R5b-2-8900b	1021688.100	1890151.000	696.8	1021688.164	1890151.008	696.649	0.064	0.008	-0.151			
5	R5b-2-8902b	1021703.800	1890123.100	697.7	1021703.770	1890123.167	697.657	-0.030	0.067	-0.043			
5	R5b-2-8903b	1021689.300	1890134.900	697	1021689.343	1890134.870	696.857	0.043	-0.030	-0.143			
5	R5b-2-8904b	1021685.100	1890134.800	696.8	1021685.189	1890134.729	696.572	0.089	-0.071	-0.228			
5	R5b-2-8907b	1021704.900	1890130.400	698	1021704.995	1890130.407	697.862	0.095	0.007	-0.138			
5	R5b-2-8932b	1021697.900	1890177.200	698.7	1021697.908	1890177.229	698.621	0.008	0.029	-0.079			
5	R5b-2-8937b	1021709.200	1890190.800	698.9	1021709.228	1890190.852	698.707	0.028	0.052	-0.193			
5	R5b-2-8939b	1021713.600	1890171.700	698.4	1021713.693	1890171.759	698.320	0.093	0.059	-0.080			
5	R5b-2-8945b	1021701.900	1890193.600	698.9	1021701.933	1890193.654	698.795	0.033	0.054	-0.105			
5	R5b-2-8947b	1021694.000	1890196.800	698	1021694.039	1890196.818	697.866	0.039	0.018	-0.134			
5	R5b-2-8955b	1021702.300	1890161.600	698	1021702.368	1890161.553	697.869	0.068	-0.047	-0.131			
5	R5b-2-8956b	1021717.900	1890155.800	698.4	1021717.929	1890155.726	698.240	0.029	-0.074	-0.160			
5	R5b-2-8960b	1021687.600	1890166.500	697.6	1021687.529	1890166.533	697.599	-0.071	0.033	-0.001			
5	R5b-2-8975b	1021711.100	1890222.100	698.9	1021711.133	1890222.145	698.752	0.033	0.045	-0.148			
5	R5b-2-8977b	1021691.100	1890179.700	697.9	1021691.130	1890179.732	697.753	0.030	0.032	-0.147			
5	R5b-2-8985b	1021704.400	1890243.500	698.8	1021704.370	1890243.485	698.727	-0.030	-0.015	-0.073			
5	R5b-2-9003b	1021705.100	1890209.500	699	1021705.139	1890209.479	698.761	0.039	-0.021	-0.239			
5	R5b-2-9004b	1021717.600	1890235.700	699.3	1021717.513	1890235.740	699.148	-0.087	0.040	-0.152			
5	R5b-2-9005b	1021722.900	1890271.700	699.1	1021722.980	1890271.651	698.893	0.080	-0.049	-0.207			
5	R5b-2-9007b	1021741.300	1890297.100	699.6	1021741.358	1890297.181	699.238	0.058	0.081	-0.362	Point was excavated deeper due to tree roots		
5	R5b-2-9009b	1021755.400	1890328.300	699.9	1021755.306	1890328.218	699.865	-0.094	-0.082	-0.035			
5	R5b-2-9014b	1021710.900	1890205.100	699.5	1021710.937	1890205.107	699.472	0.037	0.007	-0.028			
5	R5b-2-9015b	1021694.200	1890101.400	697.3	1021694.193	1890101.488	697.187	-0.007	0.088	-0.113			
5	R5b-2-9016b	1021697.200	1890213.100	697.7	1021697.202	1890213.085	697.635	0.002	-0.015	-0.065			
5	R5b-2-9018b	1021696.300	1890230.300	698.1	1021696.313	1890230.302	698.031	0.013	0.002	-0.069			
5	R5b-2-9579b	1021731.300	1890285.500	699	1021731.374	1890285.549	698.919	0.074	0.049	-0.081			
5	R5b-2-9582b	1021748.600	1890313.400	699.5	1021748.627	1890313.371	699.451	0.027	-0.029	-0.049			
5	R5b-2-9588b	1021739.500	1890282.100	699.3	1021739.426	1890282.177	699.065	-0.074	0.077	-0.235			
5	R5b-2-9589b	1021729.400	1890266.700	699.7	1021729.408	1890266.792	699.474	0.008	0.092	-0.226			
5	R5b-2-9593b	1021709.500	1890260.300	698	1021709.498	1890260.263	697.820	-0.002	-0.037	-0.180			
5	R5b-2-9656b	1021722.900	1890251.600	699.3	1021722.964	1890251.561	699.265	0.064	-0.039	-0.035			

△ Elevation < -0.25 ft Blue

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-2

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-2-9668b	1021728.500	1890255.900	699.4	1021728.516	1890255.951	699.241	0.016	0.051	-0.159			
5	R5b-2-B1	1021756.900	1890331.900	699.9	1021756.880	1890331.782	699.895	-0.020	-0.118	-0.005			
5	R5b-2-B10	1021744.000	1890280.700	699.3	1021743.988	1890280.629	698.860	-0.012	-0.071	-0.440	Isolated over excavation of Targeted Material		
5	R5b-2-B11	1021721.300	1890273.500	699.1	1021721.364	1890273.563	698.541	0.064	0.063	-0.559	Isolated over excavation of Targeted Material		
5	R5b-2-B12	1021731.400	1890265.700	699.7	1021731.445	1890265.769	699.620	0.045	0.069	-0.080			
5	R5b-2-B13	1021707.900	1890260.200	698	1021707.860	1890260.124	697.796	-0.040	-0.076	-0.204			
5	R5b-2-B14	1021731.000	1890253.300	699.4	1021731.054	1890253.303	699.352	0.054	0.003	-0.048			
5	R5b-2-B15	1021725.900	1890249.800	699.3	1021725.897	1890249.883	699.254	-0.003	0.083	-0.046			
5	R5b-2-B16	1021703.400	1890244.500	698.8	1021703.362	1890244.453	698.665	-0.038	-0.047	-0.135			
5	R5b-2-B17	1021695.100	1890231.700	698.1	1021695.214	1890231.661	698.089	0.114	-0.039	-0.011			
5	R5b-2-B18	1021723.700	1890230.300	699.3	1021723.684	1890230.320	699.243	-0.016	0.020	-0.057			
5	R5b-2-B19	1021715.100	1890221.300	698.9	1021715.046	1890221.274	698.891	-0.054	-0.026	-0.009			
5	R5b-2-B2	1021753.800	1890329.200	699.9	1021753.771	1890329.169	699.757	-0.029	-0.031	-0.143			
5	R5b-2-B20	1021694.700	1890213.700	697.7	1021694.701	1890213.794	697.677	0.001	0.094	-0.023			
5	R5b-2-B21	1021715.000	1890203.100	699.5	1021715.002	1890203.088	699.396	0.002	-0.012	-0.104			
5	R5b-2-B22	1021690.400	1890198.000	698	1021690.368	1890197.972	697.855	-0.032	-0.028	-0.145			
5	R5b-2-B23	1021712.600	1890188.400	698.9	1021712.606	1890188.430	698.707	0.006	0.030	-0.193			
5	R5b-2-B24	1021706.900	1890181.600	698.9	1021706.969	1890181.592	698.747	0.069	-0.008	-0.153			
5	R5b-2-B25	1021687.800	1890181.400	697.9	1021687.935	1890181.445	697.850	0.135	0.045	-0.050			
5	R5b-2-B26	1021714.800	1890178.800	698.4	1021714.708	1890178.758	698.358	-0.092	-0.042	-0.042			
5	R5b-2-B27	1021717.300	1890170.400	698.4	1021717.305	1890170.419	698.343	0.005	0.019	-0.057			
5	R5b-2-B28	1021686.600	1890167.300	697.6	1021686.605	1890167.278	697.567	0.005	-0.022	-0.033			
5	R5b-2-B29	1021719.400	1890162.400	698.4	1021719.389	1890162.410	698.397	-0.011	0.010	-0.003			
5	R5b-2-B3	1021758.500	1890326.700	699.9	1021758.458	1890326.608	699.893	-0.042	-0.092	-0.007			
5	R5b-2-B30	1021723.500	1890160.600	698.4	1021723.495	1890160.518	698.310	-0.005	-0.082	-0.090			
5	R5b-2-B31	1021721.300	1890154.300	698.4	1021721.342	1890154.247	698.313	0.042	-0.053	-0.087			
5	R5b-2-B32	1021716.300	1890152.600	698.4	1021716.296	1890152.562	698.390	-0.004	-0.038	-0.010			
5	R5b-2-B33	1021685.900	1890151.400	696.8	1021685.922	1890151.316	696.676	0.022	-0.084	-0.124			
5	R5b-2-B34	1021707.600	1890145.300	697.9	1021707.645	1890145.336	697.719	0.045	0.036	-0.181			
5	R5b-2-B35	1021680.900	1890135.200	696.8	1021680.988	1890135.161	696.481	0.088	-0.039	-0.319	Isolated over excavation of Targeted Material		
5	R5b-2-B36	1021708.200	1890129.500	698	1021708.259	1890129.420	697.767	0.059	-0.080	-0.233			
5	R5b-2-B37	1021684.200	1890125.200	699.6	1021684.216	1890125.195	698.148	0.016	-0.005	-1.452	Point was surveyed at existing ground surface		
5	R5b-2-B38	1021707.900	1890122.800	697.7	1021707.849	1890122.876	697.452	-0.051	0.076	-0.248			
5	R5b-2-B39	1021687.700	1890118.900	697.3	1021687.656	1890118.908	697.187	-0.044	0.008	-0.113			
5	R5b-2-B4	1021746.900	1890314.300	699.5	1021746.830	1890314.257	699.060	-0.070	-0.043	-0.440	Point was surveyed at existing ground surface		
5	R5b-2-B40	1021701.600	1890117.600	697.6	1021701.565	1890117.589	697.455	-0.035	-0.011	-0.145			
5	R5b-2-B41	1021685.200	1890109.000	698.6	1021685.171	1890108.975	697.989	-0.029	-0.025	-0.611	Point was surveyed at existing ground surface		

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-2

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-2-B42	1021699.700	1890103.500	697.5	1021699.687	1890103.475	697.406	-0.013	-0.025	-0.094			
5	R5b-2-B43	1021696.500	1890098.800	697.3	1021696.508	1890098.745	697.054	0.008	-0.055	-0.246			
5	R5b-2-B44	1021691.300	1890097.300	697.3	1021691.275	1890097.287	696.708	-0.025	-0.013	-0.592	Isolated over excavation of Targeted Material		
5	R5b-2-B5	1021751.700	1890311.500	699.5	1021751.664	1890311.412	699.300	-0.036	-0.088	-0.200			
5	R5b-2-B6	1021739.500	1890299.000	699.6	1021739.520	1890299.052	699.121	0.020	0.052	-0.479	Point was excavated deeper due to tree roots		
5	R5b-2-B7	1021743.900	1890295.300	699.6	1021743.969	1890295.369	699.376	0.069	0.069	-0.224			
5	R5b-2-B8	1021730.000	1890286.100	699	1021730.053	1890286.089	698.979	0.053	-0.011	-0.021			
5	R5b-2-B9	1021741.500	1890285.000	699.3	1021741.481	1890285.071	698.897	-0.019	0.071	-0.403	Isolated over excavation of Targeted Material		

△ Elevation < -0.25 ft Blue

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△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-3

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS	
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation		
5	R5b-3-14378b	1021448.000	1890000.000	697.4	1021447.957	1890000.059	697.370	-0.043	0.059	-0.030		
5	R5b-3-8357b	1021459.500	1889985.200	697	1021459.464	1889985.080	696.981	-0.036	-0.120	-0.019		
5	R5b-3-8358b	1021465.400	1889969.400	697.2	1021465.321	1889969.385	696.955	-0.079	-0.015	-0.245		
5	R5b-3-8359b	1021467.000	1889963.200	697.1	1021466.962	1889963.206	696.736	-0.038	0.006	-0.364	Isolated over excavation of Targeted Material	
5	R5b-3-8361b	1021482.200	1889960.800	696.8	1021482.293	1889960.706	696.611	0.093	-0.094	-0.189		
5	R5b-3-8363b	1021488.700	1889963.400	697.2	1021488.648	1889963.321	697.191	-0.052	-0.079	-0.009		
5	R5b-3-8367b	1021476.300	1889983.900	698.2	1021476.214	1889983.903	698.078	-0.086	0.003	-0.122		
5	R5b-3-8373b	1021481.100	1889969.700	698	1021481.185	1889969.730	697.868	0.085	0.030	-0.132		
5	R5b-3-8374b	1021454.000	1890001.600	697.6	1021454.115	1890001.707	697.539	0.115	0.107	-0.061		
5	R5b-3-8375b	1021455.600	1889963.900	697.4	1021455.487	1889963.890	697.347	-0.113	-0.010	-0.053		
5	R5b-3-8376b	1021449.900	1889979.000	697.4	1021449.892	1889979.108	697.177	-0.008	0.108	-0.223		
5	R5b-3-8377b	1021446.400	1889987.200	697.9	1021446.375	1889987.266	697.664	-0.025	0.066	-0.236		
5	R5b-3-8381b	1021439.700	1889968.600	696.9	1021439.801	1889968.540	696.477	0.101	-0.060	-0.423	Isolated over excavation of Targeted Material	
5	R5b-3-8382b	1021432.500	1889983.700	697.5	1021432.393	1889983.634	697.427	-0.107	-0.066	-0.073		
5	R5b-3-8384b	1021512.100	1889968.200	698	1021512.148	1889968.162	697.962	0.048	-0.038	-0.038		
5	R5b-3-8386b	1021527.100	1889970.700	698	1021527.177	1889970.659	697.419	0.077	-0.041	-0.581	Isolated over excavation of Targeted Material	
5	R5b-3-8395b	1021472.900	1890003.600	697.8	1021472.967	1890003.619	697.768	0.067	0.019	-0.032		
5	R5b-3-8396b	1021479.900	1890001.600	698.4	1021479.967	1890001.704	698.187	0.067	0.104	-0.213		
5	R5b-3-8401b	1021495.700	1889977.600	698.7	1021495.577	1889977.605	698.682	-0.123	0.005	-0.018		
5	R5b-3-8403b	1021536.500	1889973.100	697.3	1021536.531	1889973.166	697.282	0.031	0.066	-0.018		
5	R5b-3-8404b	1021471.800	1890009.300	697.8	1021471.778	1890009.241	697.672	-0.022	-0.059	-0.128		
5	R5b-3-8454b	1021460.700	1889960.800	697.1	1021460.695	1889960.671	696.888	-0.005	-0.129	-0.212		
5	R5b-3-8456b	1021455.500	1889962.500	697.2	1021455.618	1889962.462	697.004	0.118	-0.038	-0.196		
5	R5b-3-8458b	1021441.000	1889964.800	698	1021440.967	1889964.877	697.931	-0.033	0.077	-0.069		
5	R5b-3-8463b	1021428.300	1889974.200	699.9	1021428.314	1889974.229	699.802	0.014	0.029	-0.098		
5	R5b-3-B1	1021479.800	1890013.700	697.8	1021479.799	1890013.747	697.796	-0.001	0.047	-0.004		
5	R5b-3-B10	1021430.600	1889987.200	697.5	1021430.691	1889987.182	697.427	0.091	-0.018	-0.073		
5	R5b-3-B11	1021480.300	1889984.700	698.2	1021480.233	1889984.673	698.188	-0.067	-0.027	-0.012		
5	R5b-3-B12	1021494.300	1889981.300	698.7	1021494.312	1889981.367	698.622	0.012	0.067	-0.078		
5	R5b-3-B13	1021424.700	1889980.500	699.9	1021424.677	1889980.540	699.679	-0.023	0.040	-0.221		
5	R5b-3-B14	1021502.000	1889980.500	698.7	1021502.115	1889980.477	698.531	0.115	-0.023	-0.169		
5	R5b-3-B15	1021427.000	1889978.700	699.9	1021426.971	1889978.796	699.776	-0.029	0.096	-0.124		
5	R5b-3-B16	1021499.000	1889976.900	698.7	1021499.006	1889976.922	698.683	0.006	0.022	-0.017		
5	R5b-3-B17	1021535.100	1889976.900	697.3	1021535.153	1889976.796	697.068	0.053	-0.104	-0.232		
5	R5b-3-B18	1021421.900	1889976.400	699.9	1021421.912	1889976.445	699.738	0.012	0.045	-0.162		
5	R5b-3-B19	1021540.300	1889976.100	697.3	1021540.305	1889976.092	697.173	0.005	-0.008	-0.127		
5	R5b-3-B2	1021471.500	1890013.200	697.8	1021471.510	1890013.134	697.795	0.010	-0.066	-0.005		

Δ Elevation < -0.25 ft Blue

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Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-3

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-3-B20	1021526.600	1889974.800	698	1021526.697	1889974.860	697.585	0.097	0.060	-0.415	Isolated over excavation of Targeted Material
5	R5b-3-B21	1021507.200	1889972.200	698	1021507.261	1889972.147	697.890	0.061	-0.053	-0.110	
5	R5b-3-B22	1021545.500	1889971.500	697.3	1021545.517	1889971.571	697.265	0.017	0.071	-0.035	
5	R5b-3-B23	1021537.500	1889969.500	697.3	1021537.495	1889969.455	697.083	-0.005	-0.045	-0.217	
5	R5b-3-B24	1021429.700	1889969.400	699.9	1021429.633	1889969.374	699.714	-0.067	-0.026	-0.186	
5	R5b-3-B25	1021541.700	1889968.400	697.3	1021541.618	1889968.337	697.250	-0.082	-0.063	-0.050	
5	R5b-3-B26	1021528.500	1889967.300	698	1021528.501	1889967.393	696.939	0.001	0.093	-1.061	Excavated deeper due to equip. ruts
5	R5b-3-B27	1021513.600	1889964.400	698	1021513.571	1889964.368	697.970	-0.029	-0.032	-0.030	
5	R5b-3-B28	1021489.000	1889961.000	697.2	1021488.930	1889960.934	696.067	-0.070	-0.066	-1.133	Excavated deeper due to equip. ruts
5	R5b-3-B29	1021440.700	1889960.800	698	1021440.726	1889960.890	697.850	0.026	0.090	-0.150	
5	R5b-3-B3	1021483.900	1890009.900	698.4	1021483.892	1890009.833	698.189	-0.008	-0.067	-0.211	
5	R5b-3-B30	1021455.300	1889959.600	697.2	1021455.399	1889959.679	696.858	0.099	0.079	-0.342	Isolated over excavation of Targeted Material
5	R5b-3-B31	1021479.000	1889959.400	696.8	1021478.984	1889959.440	696.621	-0.016	0.040	-0.179	
5	R5b-3-B32	1021468.000	1889959.200	697.1	1021468.048	1889959.134	696.660	0.048	-0.066	-0.440	Isolated over excavation of Targeted Material
5	R5b-3-B33	1021460.400	1889957.100	697.1	1021460.483	1889957.110	697.074	0.083	0.010	-0.026	
5	R5b-3-B34	1021483.100	1889957.100	696.8	1021483.170	1889957.124	696.731	0.070	0.024	-0.069	
5	R5b-3-B4	1021467.300	1890007.000	697.8	1021467.273	1890006.975	697.709	-0.027	-0.025	-0.091	
5	R5b-3-B5	1021452.900	1890005.500	697.6	1021452.954	1890005.393	697.299	0.054	-0.107	-0.301	Isolated over excavation of Targeted Material
5	R5b-3-B6	1021445.700	1890003.100	697.4	1021445.740	1890003.015	697.334	0.040	-0.085	-0.066	
5	R5b-3-B7	1021485.300	1890000.900	698.4	1021485.227	1890000.826	698.397	-0.073	-0.074	-0.003	
5	R5b-3-B8	1021481.300	1889997.800	698.4	1021481.269	1889997.727	698.395	-0.031	-0.073	-0.005	
5	R5b-3-B9	1021445.000	1889991.900	697.9	1021444.969	1889991.924	697.315	-0.031	0.024	-0.585	Isolated over excavation of Targeted Material

Δ Elevation < -0.25 ft Blue

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Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-4

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-4-8502b	1021325.400	1889699.400	697.3	1021325.471	1889699.352	697.193	0.071	-0.048	-0.107			
5	R5b-4-8560b	1021316.200	1889725.300	697.9	1021316.134	1889725.322	697.798	-0.066	0.022	-0.102			
5	R5b-4-8563b	1021324.500	1889725.300	698.3	1021324.488	1889725.345	698.139	-0.012	0.045	-0.161			
5	R5b-4-8564b	1021331.300	1889712.600	697.5	1021331.407	1889712.580	697.368	0.107	-0.020	-0.132			
5	R5b-4-8565b	1021309.800	1889725.600	696.8	1021309.731	1889725.617	696.733	-0.069	0.017	-0.067			
5	R5b-4-8568b	1021315.300	1889713.000	697.6	1021315.252	1889713.021	697.567	-0.048	0.021	-0.033			
5	R5b-4-8572b	1021329.600	1889699.700	697.3	1021329.700	1889699.706	697.084	0.100	0.006	-0.216			
5	R5b-4-8602b	1021309.700	1889739.300	697.1	1021309.708	1889739.321	696.436	0.008	0.021	-0.664	Isolated over excavation of Targeted Material		
5	R5b-4-8609b	1021329.600	1889737.800	698.5	1021329.643	1889737.855	698.332	0.043	0.055	-0.168			
5	R5b-4-8610b	1021310.800	1889719.400	696.9	1021310.849	1889719.423	696.717	0.049	0.023	-0.183			
5	R5b-4-8612b	1021314.800	1889770.500	697.1	1021314.848	1889770.461	696.988	0.048	-0.039	-0.112			
5	R5b-4-8618b	1021310.900	1889755.200	696.7	1021310.826	1889755.179	696.697	-0.074	-0.021	-0.003			
5	R5b-4-8626b	1021329.800	1889766.100	698.4	1021329.859	1889766.056	698.322	0.059	-0.044	-0.078			
5	R5b-4-8629b	1021329.400	1889752.900	698.2	1021329.320	1889752.865	698.111	-0.080	-0.035	-0.089			
5	R5b-4-8666b	1021337.100	1889834.300	696.6	1021337.047	1889834.228	696.444	-0.053	-0.072	-0.156			
5	R5b-4-8669b	1021331.600	1889802.800	698.2	1021331.539	1889802.800	698.199	-0.061	0.000	-0.001			
5	R5b-4-8671b	1021320.900	1889795.600	696.8	1021320.838	1889795.597	696.744	-0.062	-0.003	-0.056			
5	R5b-4-8673b	1021321.400	1889788.100	697.9	1021321.502	1889788.143	697.662	0.102	0.043	-0.238			
5	R5b-4-8676b	1021359.000	1889845.300	699.4	1021359.062	1889845.388	699.303	0.062	0.088	-0.097			
5	R5b-4-8677b	1021336.700	1889820.700	697.6	1021336.663	1889820.715	697.396	-0.037	0.015	-0.204			
5	R5b-4-8678b	1021349.600	1889826.500	699.2	1021349.620	1889826.383	699.148	0.020	-0.117	-0.052			
5	R5b-4-8679b	1021340.800	1889812.700	698.4	1021340.792	1889812.779	698.331	-0.008	0.079	-0.069			
5	R5b-4-8681b	1021332.300	1889807.800	698	1021332.453	1889807.832	697.998	0.153	0.032	-0.002			
5	R5b-4-8682b	1021345.000	1889833.500	698.3	1021345.009	1889833.541	698.066	0.009	0.041	-0.234			
5	R5b-4-8684b	1021338.600	1889787.500	699	1021338.570	1889787.435	698.778	-0.030	-0.065	-0.222			
5	R5b-4-8685b	1021341.900	1889839.400	696.9	1021341.865	1889839.307	696.770	-0.035	-0.093	-0.130			
5	R5b-4-8690b	1021338.900	1889803.300	699	1021338.877	1889803.228	698.853	-0.023	-0.072	-0.147			
5	R5b-4-8726b	1021362.600	1889872.400	696.9	1021362.615	1889872.412	696.862	0.015	0.012	-0.038			
5	R5b-4-8727b	1021363.200	1889869.600	695.8	1021363.124	1889869.649	695.765	-0.076	0.049	-0.035			
5	R5b-4-8729b	1021368.000	1889862.000	698.2	1021368.090	1889862.035	697.976	0.090	0.035	-0.224			
5	R5b-4-8731b	1021363.600	1889848.900	698.8	1021363.535	1889848.971	698.799	-0.065	0.071	-0.001			
5	R5b-4-8733b	1021355.600	1889864.300	697	1021355.626	1889864.406	696.921	0.026	0.106	-0.079			
5	R5b-4-8748b	1021356.400	1889852.200	698	1021356.445	1889852.259	697.931	0.045	0.059	-0.069			
5	R5b-4-8761b	1021376.600	1889877.900	698.2	1021376.602	1889877.944	698.103	0.002	0.044	-0.097			
5	R5b-4-8789b	1021370.600	1889873.400	698.9	1021370.601	1889873.485	698.803	0.001	0.085	-0.097			
5	R5b-4-B1	1021379.300	1889881.400	698.2	1021379.229	1889881.402	697.917	-0.071	0.002	-0.283	Isolated over excavation of Targeted Material		
5	R5b-4-B10	1021352.700	1889861.400	697	1021352.679	1889861.323	696.786	-0.021	-0.077	-0.214			

Δ Elevation < -0.25 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-4

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-4-B11	1021369.600	1889858.800	698.2	1021369.671	1889858.855	698.056	0.071	0.055	-0.144			
5	R5b-4-B12	1021353.100	1889855.400	698	1021353.055	1889855.443	697.890	-0.045	0.043	-0.110			
5	R5b-4-B13	1021367.300	1889845.700	698.8	1021367.185	1889845.760	698.797	-0.115	0.060	-0.003			
5	R5b-4-B14	1021361.900	1889841.800	699.4	1021361.859	1889841.691	699.323	-0.041	-0.109	-0.077			
5	R5b-4-B15	1021336.700	1889841.200	696.9	1021336.689	1889841.175	696.802	-0.011	-0.025	-0.098			
5	R5b-4-B16	1021348.800	1889836.300	698.3	1021348.798	1889836.297	698.068	-0.002	-0.003	-0.232			
5	R5b-4-B17	1021332.400	1889834.200	696.6	1021332.412	1889834.143	696.524	0.012	-0.057	-0.076			
5	R5b-4-B18	1021352.600	1889829.800	699.2	1021352.657	1889829.847	699.198	0.057	0.047	-0.002			
5	R5b-4-B19	1021334.400	1889824.200	697.6	1021334.501	1889824.243	697.410	0.101	0.043	-0.190			
5	R5b-4-B2	1021375.300	1889879.400	698.2	1021375.261	1889879.379	698.142	-0.039	-0.021	-0.058			
5	R5b-4-B20	1021352.700	1889823.500	699.2	1021352.750	1889823.427	699.144	0.050	-0.073	-0.056			
5	R5b-4-B21	1021329.500	1889820.000	697.6	1021329.517	1889820.007	697.371	0.017	0.007	-0.229			
5	R5b-4-B22	1021332.400	1889816.200	697.6	1021332.319	1889816.190	697.363	-0.081	-0.010	-0.237			
5	R5b-4-B23	1021342.900	1889810.200	698.4	1021342.888	1889810.140	698.308	-0.012	-0.060	-0.092			
5	R5b-4-B24	1021330.100	1889809.700	698	1021330.093	1889809.689	697.928	-0.007	-0.011	-0.072			
5	R5b-4-B25	1021326.000	1889802.800	698.2	1021325.962	1889802.822	698.119	-0.038	0.022	-0.081			
5	R5b-4-B26	1021342.200	1889802.500	699	1021342.242	1889802.566	698.879	0.042	0.066	-0.121			
5	R5b-4-B27	1021316.900	1889795.700	696.8	1021316.989	1889795.766	696.585	0.089	0.066	-0.215			
5	R5b-4-B28	1021317.100	1889788.500	697.9	1021317.035	1889788.433	697.633	-0.065	-0.067	-0.267	Isolated over excavation of Targeted Material		
5	R5b-4-B29	1021342.900	1889787.200	699	1021342.999	1889787.227	698.817	0.099	0.027	-0.183			
5	R5b-4-B3	1021359.600	1889878.800	696.9	1021359.632	1889878.837	696.862	0.032	0.037	-0.038			
5	R5b-4-B30	1021311.200	1889771.200	697.1	1021311.143	1889771.220	696.995	-0.057	0.020	-0.105			
5	R5b-4-B31	1021335.100	1889764.300	698.4	1021335.135	1889764.247	698.358	0.035	-0.053	-0.042			
5	R5b-4-B32	1021307.300	1889755.000	696.7	1021307.243	1889755.020	696.575	-0.057	0.020	-0.125			
5	R5b-4-B33	1021333.200	1889751.800	698.2	1021333.224	1889751.770	698.107	0.024	-0.030	-0.093			
5	R5b-4-B34	1021306.500	1889739.700	697.1	1021306.537	1889739.704	696.330	0.037	0.004	-0.770	Isolated over excavation of Targeted Material		
5	R5b-4-B35	1021333.400	1889737.800	698.5	1021333.372	1889737.887	698.457	-0.028	0.087	-0.043			
5	R5b-4-B36	1021305.000	1889725.600	696.8	1021304.930	1889725.648	696.629	-0.070	0.048	-0.171			
5	R5b-4-B37	1021328.200	1889721.600	698.3	1021328.088	1889721.587	698.281	-0.112	-0.013	-0.019			
5	R5b-4-B38	1021307.100	1889718.200	696.9	1021307.079	1889718.234	696.830	-0.021	0.034	-0.070			
5	R5b-4-B39	1021334.900	1889712.600	697.5	1021334.951	1889712.572	697.427	0.051	-0.028	-0.073			
5	R5b-4-B4	1021368.900	1889876.300	698.9	1021368.909	1889876.205	698.533	0.009	-0.095	-0.367	Isolated over excavation of Targeted Material		
5	R5b-4-B40	1021313.400	1889712.100	697.6	1021313.447	1889712.111	697.370	0.047	0.011	-0.230			
5	R5b-4-B41	1021331.600	1889700.100	697.3	1021331.478	1889700.124	697.100	-0.122	0.024	-0.200			
5	R5b-4-B42	1021324.000	1889698.900	697.3	1021323.941	1889698.915	697.239	-0.059	0.015	-0.061			
5	R5b-4-B43	1021332.300	1889695.600	697.3	1021332.326	1889695.562	697.095	0.026	-0.038	-0.205			
5	R5b-4-B44	1021327.300	1889694.800	697.3	1021327.253	1889694.777	697.109	-0.047	-0.023	-0.191			

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-4

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-4-B5	1021384.900	1889875.600	698.2	1021384.826	1889875.613	698.140	-0.074	0.013	-0.060			
5	R5b-4-B6	1021377.900	1889874.300	698.2	1021377.893	1889874.288	698.122	-0.007	-0.012	-0.078			
5	R5b-4-B7	1021372.000	1889870.800	698.9	1021372.024	1889870.730	698.816	0.024	-0.070	-0.084			
5	R5b-4-B8	1021358.700	1889868.300	695.8	1021358.601	1889868.267	695.618	-0.099	-0.033	-0.182			
5	R5b-4-B9	1021354.900	1889865.600	697	1021354.867	1889865.533	696.858	-0.033	-0.067	-0.142			

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-5

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-5-8437b	1021062.800	1889419.300	696.8	1021062.907	1889419.265	696.735	0.107	-0.035	-0.065			
5	R5b-5-8482b	1021136.900	1889503.500	698.4	1021136.815	1889503.494	698.324	-0.085	-0.006	-0.076			
5	R5b-5-8484b	1021080.600	1889444.500	697.7	1021080.640	1889444.573	697.626	0.040	0.073	-0.074			
5	R5b-5-8489b	1021088.800	1889458.800	697.8	1021088.848	1889458.854	697.584	0.048	0.054	-0.216			
5	R5b-5-8490b	1021124.500	1889491.900	698	1021124.569	1889491.974	697.865	0.069	0.074	-0.135			
5	R5b-5-8492b	1021113.100	1889479.700	698.3	1021113.113	1889479.714	697.659	0.013	0.014	-0.641	Isolated over excavation of Targeted Material		
5	R5b-5-8497b	1021069.100	1889434.500	697.2	1021069.107	1889434.428	696.979	0.007	-0.072	-0.221			
5	R5b-5-8498b	1021100.600	1889468.400	698.1	1021100.576	1889468.361	697.873	-0.024	-0.039	-0.227			
5	R5b-5-8500b	1021064.500	1889411.700	697.7	1021064.503	1889411.676	697.474	0.003	-0.024	-0.226			
5	R5b-5-8797b	1021144.200	1889507.800	698.5	1021144.227	1889507.761	698.388	0.027	-0.039	-0.112			
5	R5b-5-B1	1021143.800	1889513.700	698.5	1021143.851	1889513.710	697.359	0.051	0.010	-1.141	Point was surveyed at existing ground surface		
5	R5b-5-B10	1021099.700	1889469.600	698.1	1021099.629	1889469.643	697.997	-0.071	0.043	-0.103			
5	R5b-5-B11	1021105.400	1889467.900	698.1	1021105.341	1889467.869	697.985	-0.059	-0.031	-0.115			
5	R5b-5-B12	1021103.200	1889462.600	698.1	1021103.172	1889462.646	698.080	-0.028	0.046	-0.020			
5	R5b-5-B13	1021087.600	1889459.300	697.8	1021087.572	1889459.269	697.499	-0.028	-0.031	-0.301	Point was surveyed at existing ground surface		
5	R5b-5-B14	1021093.400	1889458.000	697.8	1021093.501	1889457.922	697.577	0.101	-0.078	-0.223			
5	R5b-5-B15	1021079.900	1889445.000	697.7	1021079.844	1889444.976	697.466	-0.056	-0.024	-0.234			
5	R5b-5-B16	1021084.900	1889443.900	697.7	1021084.916	1889443.973	697.693	0.016	0.073	-0.007			
5	R5b-5-B17	1021068.100	1889435.200	697.2	1021068.153	1889435.192	697.072	0.053	-0.008	-0.128			
5	R5b-5-B18	1021071.500	1889434.100	697.2	1021071.529	1889434.043	697.153	0.029	-0.057	-0.047			
5	R5b-5-B19	1021061.800	1889419.300	696.8	1021061.790	1889419.178	696.750	-0.010	-0.122	-0.050			
5	R5b-5-B2	1021146.900	1889509.800	698.5	1021146.943	1889509.836	698.389	0.043	0.036	-0.111			
5	R5b-5-B20	1021066.500	1889417.900	696.8	1021066.627	1889417.995	696.736	0.127	0.095	-0.064			
5	R5b-5-B21	1021067.500	1889411.800	697.7	1021067.411	1889411.808	697.487	-0.089	0.008	-0.213			
5	R5b-5-B22	1021063.300	1889411.600	697.7	1021063.312	1889411.602	697.515	0.012	0.002	-0.185			
5	R5b-5-B23	1021064.300	1889408.000	697.7	1021064.354	1889408.066	697.669	0.054	0.066	-0.031			
5	R5b-5-B24	1021067.300	1889408.000	697.7	1021067.285	1889408.014	697.699	-0.015	0.014	-0.001			
5	R5b-5-B3	1021147.200	1889506.100	698.5	1021147.173	1889506.059	698.492	-0.027	-0.041	-0.008			
5	R5b-5-B4	1021135.400	1889504.400	698.4	1021135.274	1889504.398	697.475	-0.126	-0.002	-0.925	Point was surveyed at existing ground surface		
5	R5b-5-B5	1021140.100	1889501.600	698.4	1021140.063	1889501.595	698.375	-0.037	-0.005	-0.025			
5	R5b-5-B6	1021122.700	1889492.400	698	1021122.624	1889492.479	697.379	-0.076	0.079	-0.621	Point was surveyed at existing ground surface		
5	R5b-5-B7	1021128.300	1889490.900	698	1021128.353	1889490.879	697.942	0.053	-0.021	-0.058			
5	R5b-5-B8	1021112.300	1889480.300	698.3	1021112.328	1889480.235	698.075	0.028	-0.065	-0.225			
5	R5b-5-B9	1021117.600	1889478.900	698.3	1021117.705	1889479.003	698.082	0.105	0.103	-0.218			

Δ Elevation < -0.25 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-6

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-6-8338b	1020990.300	1889290.900	697.8	1020990.344	1889290.895	697.671	0.044	-0.005	-0.129			
5	R5b-6-8339b	1020982.900	1889278.900	697.2	1020983.038	1889278.861	697.176	0.138	-0.039	-0.024			
5	R5b-6-8342b	1020996.200	1889286.700	697.9	1020996.218	1889286.661	697.815	0.018	-0.039	-0.085			
5	R5b-6-8346b	1020982.300	1889295.000	698.2	1020982.309	1889295.091	697.874	0.009	0.091	-0.326	Point was excavated deeper due to tree roots		
5	R5b-6-8347b	1020972.500	1889253.400	698.4	1020972.530	1889253.499	698.323	0.030	0.099	-0.077			
5	R5b-6-8348b	1020973.300	1889282.500	696.6	1020973.323	1889282.522	696.588	0.023	0.022	-0.012			
5	R5b-6-8352b	1020994.300	1889306.000	697.3	1020994.338	1889305.957	697.126	0.038	-0.043	-0.174			
5	R5b-6-8353b	1020966.800	1889267.400	696.4	1020966.796	1889267.340	696.271	-0.004	-0.060	-0.129			
5	R5b-6-8428b	1020992.300	1889281.200	697.8	1020992.251	1889281.271	697.796	-0.049	0.071	-0.004			
5	R5b-6-8432b	1021001.300	1889301.600	697.6	1021001.351	1889301.625	697.464	0.051	0.025	-0.136			
5	R5b-6-8434b	1021002.300	1889293.500	698.2	1021002.308	1889293.563	697.985	0.008	0.063	-0.215			
5	R5b-6-8440b	1021006.100	1889315.900	698.1	1021005.990	1889315.848	698.057	-0.110	-0.052	-0.043			
5	R5b-6-8442b	1021012.900	1889311.600	698.4	1021012.855	1889311.540	698.366	-0.045	-0.060	-0.034			
5	R5b-6-8444b	1021020.100	1889321.600	698.3	1021020.160	1889321.616	698.175	0.060	0.016	-0.125			
5	R5b-6-8538b	1020974.500	1889267.600	697	1020974.429	1889267.463	696.764	-0.071	-0.137	-0.236			
5	R5b-6-B1	1021023.800	1889322.700	698.3	1021023.738	1889322.709	697.361	-0.062	0.009	-0.939	Point was surveyed at existing ground surface		
5	R5b-6-B10	1020980.800	1889295.000	698.2	1020980.737	1889295.072	697.451	-0.063	0.072	-0.749	Point was excavated deeper due to tree roots		
5	R5b-6-B11	1021005.900	1889290.600	698.2	1021005.998	1889290.578	698.115	0.098	-0.022	-0.085			
5	R5b-6-B12	1020973.100	1889283.800	696.6	1020973.184	1889283.842	696.570	0.084	0.042	-0.030			
5	R5b-6-B13	1020996.500	1889278.800	697.8	1020996.451	1889278.773	697.623	-0.049	-0.027	-0.177			
5	R5b-6-B14	1020986.300	1889276.700	697.2	1020986.402	1889276.745	697.196	0.102	0.045	-0.004			
5	R5b-6-B15	1020965.500	1889267.100	696.4	1020965.517	1889267.082	696.349	0.017	-0.018	-0.051			
5	R5b-6-B16	1020977.000	1889263.700	697	1020977.077	1889263.741	696.824	0.077	0.041	-0.176			
5	R5b-6-B17	1020976.000	1889256.600	698.4	1020975.943	1889256.545	698.221	-0.057	-0.055	-0.179			
5	R5b-6-B18	1020971.100	1889254.000	698.4	1020971.104	1889253.953	698.190	0.004	-0.047	-0.210			
5	R5b-6-B19	1020973.200	1889249.100	698.4	1020973.196	1889249.162	697.773	-0.004	0.062	-0.627	Point was excavated deeper due to tree roots		
5	R5b-6-B2	1021019.100	1889322.600	698.3	1021019.055	1889322.644	697.376	-0.045	0.044	-0.924	Point was surveyed at existing ground surface		
5	R5b-6-B20	1020980.000	1889248.800	698.4	1020979.951	1889248.836	698.391	-0.049	0.036	-0.009			
5	R5b-6-B3	1021023.100	1889320.100	698.3	1021023.134	1889320.040	698.288	0.034	-0.060	-0.012			
5	R5b-6-B4	1021006.100	1889317.100	698.1	1021006.109	1889317.068	698.039	0.009	-0.032	-0.061			
5	R5b-6-B5	1021009.500	1889315.000	698.1	1021009.491	1889315.034	697.882	-0.009	0.034	-0.218			
5	R5b-6-B6	1021016.000	1889313.100	698.4	1021015.928	1889313.091	698.227	-0.072	-0.009	-0.173			
5	R5b-6-B7	1021016.100	1889310.400	698.4	1021015.998	1889310.447	698.317	-0.102	0.047	-0.083			
5	R5b-6-B8	1020994.000	1889307.600	697.3	1020994.042	1889307.654	697.236	0.042	0.054	-0.064			
5	R5b-6-B9	1021005.100	1889299.300	697.6	1021005.145	1889299.357	697.558	0.045	0.057	-0.042			

Δ Elevation < -0.25 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-7

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-7-8292b	1020906.900	1889166.700	696.3	1020906.921	1889166.746	696.090	0.021	0.046	-0.210			
5	R5b-7-8293b	1020944.200	1889219.200	696.9	1020944.204	1889219.142	696.746	0.004	-0.058	-0.154			
5	R5b-7-8300b	1020912.700	1889161.000	697	1020912.713	1889161.022	696.971	0.013	0.022	-0.029			
5	R5b-7-8303b	1020900.700	1889153.100	696	1020900.771	1889153.149	695.963	0.071	0.049	-0.037			
5	R5b-7-8304b	1020892.200	1889136.900	696.7	1020892.212	1889136.930	696.461	0.012	0.030	-0.239			
5	R5b-7-8306b	1020880.700	1889126.300	696.4	1020880.641	1889126.372	696.192	-0.059	0.072	-0.208			
5	R5b-7-8320b	1020868.200	1889115.700	696.8	1020868.268	1889115.625	696.601	0.068	-0.075	-0.199			
5	R5b-7-8326b	1020926.500	1889192.800	697.2	1020926.563	1889192.777	697.185	0.063	-0.023	-0.015			
5	R5b-7-8329b	1020916.000	1889178.900	697	1020915.967	1889178.907	696.910	-0.033	0.007	-0.090			
5	R5b-7-8331b	1020916.400	1889164.900	697.7	1020916.395	1889164.967	697.539	-0.005	0.067	-0.161			
5	R5b-7-8334b	1020931.400	1889186.600	697.7	1020931.477	1889186.668	697.473	0.077	0.068	-0.227			
5	R5b-7-8335b	1020935.900	1889205.200	696.2	1020935.904	1889205.266	696.155	0.004	0.066	-0.045			
5	R5b-7-8345b	1020955.600	1889230.700	697.3	1020955.686	1889230.759	697.001	0.086	0.059	-0.299	Point was excavated deeper due to tree roots		
5	R5b-7-B1	1020959.700	1889232.100	697.3	1020959.668	1889232.002	697.060	-0.032	-0.098	-0.240			
5	R5b-7-B10	1020936.900	1889187.600	697.7	1020936.873	1889187.592	697.507	-0.027	-0.008	-0.193			
5	R5b-7-B11	1020933.900	1889184.400	697.7	1020933.860	1889184.454	697.093	-0.040	0.054	-0.607	Point was excavated deeper due to tree roots		
5	R5b-7-B12	1020915.300	1889179.200	697	1020915.355	1889179.273	696.977	0.055	0.073	-0.023			
5	R5b-7-B13	1020921.100	1889178.300	697	1020921.017	1889178.314	696.879	-0.083	0.014	-0.121			
5	R5b-7-B14	1020919.100	1889168.600	697.7	1020919.000	1889168.606	697.451	-0.100	0.006	-0.249			
5	R5b-7-B15	1020904.300	1889168.000	696.3	1020904.291	1889167.967	696.265	-0.009	-0.033	-0.035			
5	R5b-7-B16	1020922.300	1889165.900	697.7	1020922.325	1889165.967	697.601	0.025	0.067	-0.099			
5	R5b-7-B17	1020917.800	1889156.800	697	1020917.869	1889156.821	696.859	0.069	0.021	-0.141			
5	R5b-7-B18	1020899.700	1889153.400	696	1020899.763	1889153.380	695.878	0.063	-0.020	-0.122			
5	R5b-7-B19	1020905.600	1889153.200	696	1020905.551	1889153.187	695.916	-0.049	-0.013	-0.084			
5	R5b-7-B2	1020955.300	1889231.200	697.3	1020955.228	1889231.223	697.075	-0.072	0.023	-0.225			
5	R5b-7-B20	1020890.800	1889137.800	696.7	1020890.702	1889137.785	696.519	-0.098	-0.015	-0.181			
5	R5b-7-B21	1020894.900	1889134.700	696.7	1020894.866	1889134.653	696.646	-0.034	-0.047	-0.054			
5	R5b-7-B22	1020879.400	1889127.100	696.4	1020879.388	1889127.110	696.342	-0.012	0.010	-0.058			
5	R5b-7-B23	1020883.400	1889122.500	696.4	1020883.401	1889122.555	696.338	0.001	0.055	-0.062			
5	R5b-7-B24	1020867.000	1889116.800	696.8	1020867.016	1889116.804	696.439	0.016	0.004	-0.361	Point was surveyed at existing ground surface		
5	R5b-7-B25	1020865.400	1889111.800	696.8	1020865.424	1889111.824	696.790	0.024	0.024	-0.010			
5	R5b-7-B26	1020868.300	1889108.200	696.8	1020868.333	1889108.274	696.778	0.033	0.074	-0.022			
5	R5b-7-B3	1020958.600	1889227.800	697.3	1020958.500	1889227.864	697.022	-0.100	0.064	-0.278	Point was excavated deeper due to tree roots		
5	R5b-7-B4	1020942.200	1889220.300	696.9	1020942.196	1889220.300	696.709	-0.004	0.000	-0.191			
5	R5b-7-B5	1020947.000	1889216.200	696.9	1020946.979	1889216.280	696.840	-0.021	0.080	-0.060			
5	R5b-7-B6	1020934.700	1889206.000	696.2	1020934.629	1889206.063	696.183	-0.071	0.063	-0.017			
5	R5b-7-B7	1020938.200	1889202.400	696.2	1020938.148	1889202.417	696.191	-0.052	0.017	-0.009			

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-7

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-7-B8	1020925.800	1889193.500	697.2	1020925.727	1889193.485	697.150	-0.073	-0.015	-0.050	
5	R5b-7-B9	1020931.300	1889193.400	697.2	1020931.302	1889193.481	697.013	0.002	0.081	-0.187	

Δ Elevation < -0.25 ft Blue Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation -0.25 to 0.0 ft Green Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-8

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-8-8121b	1020767.100	1889102.500	695.6	1020767.135	1889102.485	695.596	0.035	-0.015	-0.004			
5	R5b-8-8164b	1020761.900	1889105.800	696.4	1020761.903	1889105.882	696.293	0.003	0.082	-0.107			
5	R5b-8-8167b	1020753.800	1889093.000	696.1	1020753.792	1889093.023	695.916	-0.008	0.023	-0.184			
5	R5b-8-8174b	1020778.900	1889114.900	695.6	1020778.765	1889114.873	695.532	-0.135	-0.027	-0.068			
5	R5b-8-8191b	1020827.300	1889175.400	696.9	1020827.296	1889175.377	696.847	-0.004	-0.023	-0.053			
5	R5b-8-8192b	1020784.300	1889126.100	696.3	1020784.307	1889126.101	696.222	0.007	0.001	-0.078			
5	R5b-8-8193b	1020787.100	1889123.500	695.1	1020787.097	1889123.594	695.049	-0.003	0.094	-0.051			
5	R5b-8-8198b	1020805.300	1889152.100	695.5	1020805.253	1889151.999	695.431	-0.047	-0.101	-0.069			
5	R5b-8-8201b	1020812.900	1889154.600	695.8	1020812.878	1889154.557	695.626	-0.022	-0.043	-0.174			
5	R5b-8-8202b	1020816.700	1889162.900	696.1	1020816.732	1889162.911	696.066	0.032	0.011	-0.034			
5	R5b-8-8241b	1020795.700	1889139.000	696.5	1020795.726	1889139.104	696.276	0.026	0.104	-0.224			
5	R5b-8-8242b	1020808.600	1889149.900	695.6	1020808.532	1889149.959	695.494	-0.068	0.059	-0.106			
5	R5b-8-8243b	1020798.000	1889137.200	695.6	1020798.018	1889137.084	695.556	0.018	-0.116	-0.044			
5	R5b-8-8250b	1020777.500	1889116.800	694.1	1020777.471	1889116.830	694.041	-0.029	0.030	-0.059			
5	R5b-8-8256b	1020837.300	1889186.500	697.2	1020837.355	1889186.432	697.131	0.055	-0.068	-0.069			
5	R5b-8-B1	1020832.900	1889189.700	697.2	1020832.947	1889189.655	697.165	0.047	-0.045	-0.035			
5	R5b-8-B10	1020812.900	1889145.900	695.6	1020812.789	1889146.036	695.584	-0.111	0.136	-0.016			
5	R5b-8-B11	1020792.500	1889143.100	696.5	1020792.546	1889143.104	696.197	0.046	0.004	-0.303	Isolated over excavation of Targeted Material		
5	R5b-8-B12	1020801.500	1889134.500	695.6	1020801.419	1889134.460	695.510	-0.081	-0.040	-0.090			
5	R5b-8-B13	1020781.500	1889130.000	696.3	1020781.477	1889129.983	696.088	-0.023	-0.017	-0.212			
5	R5b-8-B14	1020770.900	1889120.800	694.1	1020770.804	1889120.732	694.084	-0.096	-0.068	-0.016			
5	R5b-8-B15	1020790.400	1889120.800	695.1	1020790.345	1889120.846	694.941	-0.055	0.046	-0.159			
5	R5b-8-B16	1020782.300	1889112.100	695.6	1020782.229	1889112.139	695.597	-0.071	0.039	-0.003			
5	R5b-8-B17	1020758.900	1889108.600	696.4	1020758.884	1889108.516	696.346	-0.016	-0.084	-0.054			
5	R5b-8-B18	1020758.800	1889103.000	696.4	1020758.878	1889103.032	696.168	0.078	0.032	-0.232			
5	R5b-8-B19	1020769.600	1889101.300	695.6	1020769.556	1889101.393	695.578	-0.044	0.093	-0.022			
5	R5b-8-B2	1020840.100	1889189.700	697.2	1020840.077	1889189.711	697.068	-0.023	0.011	-0.132			
5	R5b-8-B20	1020753.100	1889093.800	696.1	1020753.122	1889093.695	695.942	0.022	-0.105	-0.158			
5	R5b-8-B21	1020751.500	1889089.800	696.1	1020751.474	1889089.901	696.065	-0.026	0.101	-0.035			
5	R5b-8-B22	1020754.300	1889087.200	696.1	1020754.337	1889087.226	695.916	0.037	0.026	-0.184			
5	R5b-8-B3	1020838.900	1889185.500	697.2	1020838.774	1889185.482	696.687	-0.126	-0.018	-0.513	Point was excavated deeper due to tree roots		
5	R5b-8-B4	1020823.200	1889179.100	696.9	1020823.290	1889179.133	696.872	0.090	0.033	-0.028			
5	R5b-8-B5	1020828.400	1889175.000	696.9	1020828.280	1889175.047	696.664	-0.120	0.047	-0.236			
5	R5b-8-B6	1020809.500	1889169.400	696.1	1020809.540	1889169.484	696.066	0.040	0.084	-0.034			
5	R5b-8-B7	1020818.300	1889161.400	696.1	1020818.321	1889161.346	696.032	0.021	-0.054	-0.068			
5	R5b-8-B8	1020801.700	1889155.600	695.5	1020801.737	1889155.663	695.427	0.037	0.063	-0.073			
5	R5b-8-B9	1020816.500	1889151.100	695.8	1020816.471	1889151.181	695.743	-0.029	0.081	-0.057			

△ Elevation < -0.25 ft Blue

△ Easting/Northing < or = 0.2 ft Green

△ Elevation -0.25 to 0.0 ft Green

△ Easting/Northing > 0.2 ft Blue

△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-9-14372b	1020754.900	1888986.500	695.9	1020754.858	1888986.468	695.814	-0.042	-0.032	-0.086			
5	R5b-9-7508b	1020758.800	1888656.500	696.4	1020758.873	1888656.492	695.931	0.073	-0.008	-0.469	Isolated over excavation of Targeted Material		
5	R5b-9-7511b	1020770.000	1888636.100	696.2	1020769.973	1888636.140	696.161	-0.027	0.040	-0.039			
5	R5b-9-7512b	1020770.700	1888652.100	696.6	1020770.699	1888652.132	696.575	-0.001	0.032	-0.025			
5	R5b-9-7517b	1020767.500	1888668.500	697	1020767.442	1888668.534	696.990	-0.058	0.034	-0.010			
5	R5b-9-7518b	1020752.100	1888664.200	696.3	1020752.041	1888664.178	696.268	-0.059	-0.022	-0.032			
5	R5b-9-7519b	1020770.400	1888659.700	695.7	1020770.435	1888659.708	695.648	0.035	0.008	-0.052			
5	R5b-9-7539b	1020744.400	1888697.000	696.4	1020744.404	1888697.004	696.325	0.004	0.004	-0.075			
5	R5b-9-7540b	1020748.100	1888679.700	696.3	1020748.029	1888679.732	696.145	-0.071	0.032	-0.155			
5	R5b-9-7542b	1020762.100	1888701.700	696.6	1020762.074	1888701.707	696.594	-0.026	0.007	-0.006			
5	R5b-9-7544b	1020774.000	1888685.900	696.6	1020773.948	1888685.904	696.551	-0.052	0.004	-0.049			
5	R5b-9-7545b	1020765.300	1888684.200	696.7	1020765.325	1888684.217	696.568	0.025	0.017	-0.132			
5	R5b-9-7592b	1020758.300	1888716.200	697.2	1020758.301	1888716.097	697.179	0.001	-0.103	-0.021			
5	R5b-9-7593b	1020769.300	1888702.100	696.8	1020769.329	1888702.062	696.580	0.029	-0.038	-0.220			
5	R5b-9-7594b	1020737.800	1888747.700	697.2	1020737.809	1888747.704	696.967	0.009	0.004	-0.233			
5	R5b-9-7596b	1020763.100	1888709.600	696.8	1020763.100	1888709.505	696.728	0.000	-0.095	-0.072			
5	R5b-9-7597b	1020740.200	1888711.700	696.4	1020740.147	1888711.679	696.193	-0.053	-0.021	-0.207			
5	R5b-9-7599b	1020744.400	1888731.100	697.3	1020744.463	1888731.025	697.193	0.063	-0.075	-0.107			
5	R5b-9-7602b	1020729.500	1888744.400	696.7	1020729.369	1888744.427	696.489	-0.131	0.027	-0.211			
5	R5b-9-7603b	1020736.100	1888729.800	697	1020736.106	1888729.828	696.793	0.006	0.028	-0.207			
5	R5b-9-7645b	1020734.400	1888762.200	697.8	1020734.406	1888762.164	697.672	0.006	-0.036	-0.128			
5	R5b-9-7648b	1020708.000	1888821.500	697.6	1020707.996	1888821.408	697.557	-0.004	-0.092	-0.043			
5	R5b-9-7650b	1020725.700	1888758.500	696.2	1020725.643	1888758.416	696.081	-0.057	-0.084	-0.119			
5	R5b-9-7653b	1020726.000	1888791.500	696.6	1020725.943	1888791.476	696.465	-0.057	-0.024	-0.135			
5	R5b-9-7654b	1020723.600	1888775.100	696.8	1020723.593	1888775.094	696.560	-0.007	-0.006	-0.240			
5	R5b-9-7655b	1020729.400	1888778.900	697.1	1020729.423	1888778.842	696.917	0.023	-0.058	-0.183			
5	R5b-9-7673b	1020723.400	1888834.500	697.1	1020723.460	1888834.476	697.037	0.060	-0.024	-0.063			
5	R5b-9-7674b	1020715.500	1888833.800	696.7	1020715.533	1888833.771	696.651	0.033	-0.029	-0.049			
5	R5b-9-7676b	1020723.300	1888843.100	697.2	1020723.378	1888843.055	697.111	0.078	-0.045	-0.089			
5	R5b-9-7680b	1020707.900	1888837.100	696.6	1020707.911	1888837.125	696.464	0.011	0.025	-0.136			
5	R5b-9-7682b	1020707.600	1888854.700	695.7	1020707.583	1888854.600	695.671	-0.017	-0.100	-0.029			
5	R5b-9-7684b	1020726.500	1888859.200	697.5	1020726.583	1888859.208	697.285	0.083	0.008	-0.215			
5	R5b-9-7733b	1020723.700	1888905.400	696.5	1020723.670	1888905.353	696.485	-0.030	-0.047	-0.015			
5	R5b-9-7734b	1020729.900	1888892.900	697.5	1020729.949	1888892.951	697.446	0.049	0.051	-0.054			
5	R5b-9-7736b	1020713.100	1888887.700	696.5	1020713.109	1888887.817	696.293	0.009	0.117	-0.207			
5	R5b-9-7737b	1020727.500	1888875.900	697.7	1020727.466	1888875.876	697.551	-0.034	-0.024	-0.149			
5	R5b-9-7740b	1020710.600	1888870.400	696.6	1020710.652	1888870.461	696.551	0.052	0.061	-0.049			

△ Elevation < -0.25 ft Blue△ Easting/Northing < or = 0.2 ft Green△ Elevation -0.25 to 0.0 ft Green△ Easting/Northing > 0.2 ft Blue△ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-9-7779b	1020751.200	1888949.100	697.5	1020751.236	1888949.114	697.293	0.036	0.014	-0.207			
5	R5b-9-7781b	1020726.700	1888920.500	697.1	1020726.793	1888920.611	697.094	0.093	0.111	-0.006			
5	R5b-9-7784b	1020740.700	1888928.700	697.7	1020740.699	1888928.764	697.674	-0.001	0.064	-0.026			
5	R5b-9-7785b	1020732.900	1888935.900	697.2	1020732.866	1888935.995	697.012	-0.034	0.095	-0.188			
5	R5b-9-7786b	1020737.500	1888945.300	697.2	1020737.481	1888945.231	697.015	-0.019	-0.069	-0.185			
5	R5b-9-7790b	1020753.800	1888962.000	696.8	1020753.788	1888962.087	696.765	-0.012	0.087	-0.035			
5	R5b-9-7791b	1020743.500	1888961.500	696.1	1020743.487	1888961.541	696.066	-0.013	0.041	-0.034			
5	R5b-9-7792b	1020752.800	1888976.700	696.8	1020752.883	1888976.738	696.552	0.083	0.038	-0.248			
5	R5b-9-7842b	1020717.500	1888807.600	695.9	1020717.443	1888807.486	695.771	-0.057	-0.114	-0.129			
5	R5b-9-7853b	1020764.400	1888990.300	697.1	1020764.443	1888990.308	697.020	0.043	0.008	-0.080			
5	R5b-9-7908b	1020717.500	1888907.000	697.1	1020717.514	1888907.006	697.033	0.014	0.006	-0.067			
5	R5b-9-7957b	1020761.200	1888654.100	695.9	1020761.223	1888654.100	695.869	0.023	0.000	-0.031			
5	R5b-9-7959b	1020734.600	1888708.800	695.1	1020734.626	1888708.745	695.089	0.026	-0.055	-0.011			
5	R5b-9-7960b	1020740.500	1888694.600	696.2	1020740.464	1888694.531	696.139	-0.036	-0.069	-0.061			
5	R5b-9-7967b	1020720.200	1888774.400	695.9	1020720.080	1888774.446	695.890	-0.120	0.046	-0.010			
5	R5b-9-8006b	1020768.900	1888644.800	696.3	1020768.857	1888644.789	696.212	-0.043	-0.011	-0.088			
5	R5b-9-B1	1020764.700	1888992.800	697.1	1020764.644	1888992.768	696.956	-0.056	-0.032	-0.144			
5	R5b-9-B10	1020756.000	1888950.100	697.5	1020755.970	1888950.136	697.383	-0.030	0.036	-0.117			
5	R5b-9-B11	1020736.300	1888945.600	697.2	1020736.294	1888945.599	697.030	-0.006	-0.001	-0.170			
5	R5b-9-B12	1020754.700	1888941.900	697.5	1020754.582	1888941.952	697.468	-0.118	0.052	-0.032			
5	R5b-9-B13	1020743.000	1888939.000	697.2	1020743.057	1888939.081	697.179	0.057	0.081	-0.021			
5	R5b-9-B14	1020731.400	1888936.000	697.2	1020731.325	1888935.961	697.169	-0.075	-0.039	-0.031			
5	R5b-9-B15	1020740.700	1888934.400	697.7	1020740.606	1888934.381	697.636	-0.094	-0.019	-0.064			
5	R5b-9-B16	1020746.500	1888923.300	697.7	1020746.444	1888923.202	697.649	-0.056	-0.098	-0.051			
5	R5b-9-B17	1020725.000	1888921.600	697.1	1020725.071	1888921.655	696.688	0.071	0.055	-0.412	Isolated over excavation of Targeted Material		
5	R5b-9-B18	1020732.300	1888914.700	697.1	1020732.242	1888914.712	697.033	-0.058	0.012	-0.067			
5	R5b-9-B19	1020722.600	1888909.800	696.5	1020722.553	1888909.877	696.389	-0.047	0.077	-0.111			
5	R5b-9-B2	1020767.100	1888992.400	697.1	1020767.097	1888992.439	697.062	-0.003	0.039	-0.038			
5	R5b-9-B20	1020716.200	1888907.500	697.1	1020716.152	1888907.520	697.070	-0.048	0.020	-0.030			
5	R5b-9-B21	1020730.900	1888907.200	696.5	1020730.932	1888907.246	696.350	0.032	0.046	-0.150			
5	R5b-9-B22	1020733.700	1888894.100	697.5	1020733.533	1888894.035	697.258	-0.167	-0.065	-0.242			
5	R5b-9-B23	1020711.800	1888888.000	696.5	1020711.746	1888888.123	696.325	-0.054	0.123	-0.175			
5	R5b-9-B24	1020731.500	1888877.300	697.7	1020731.554	1888877.324	697.670	0.054	0.024	-0.030			
5	R5b-9-B25	1020708.800	1888870.300	696.6	1020708.835	1888870.259	696.462	0.035	-0.041	-0.138			
5	R5b-9-B26	1020731.100	1888860.300	697.5	1020731.146	1888860.224	697.339	0.046	-0.076	-0.161			
5	R5b-9-B27	1020705.700	1888854.900	695.7	1020705.702	1888854.929	695.679	0.002	0.029	-0.021			
5	R5b-9-B28	1020726.100	1888847.500	697.2	1020726.173	1888847.512	697.084	0.073	0.012	-0.116			

△ Elevation < -0.25 ft Blue
 △ Elevation -0.25 to 0.0 ft Green
 △ Elevation > 0.0 ft Red

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
Bottom of Targeted Material
Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-9-B29	1020706.400	1888837.200	696.6	1020706.445	1888837.198	696.245	0.045	-0.002	-0.355	Isolated over excavation of Targeted Material
5	R5b-9-B3	1020768.200	1888989.700	697.1	1020768.206	1888989.767	697.024	0.006	0.067	-0.076	
5	R5b-9-B30	1020727.800	1888835.000	697.1	1020727.729	1888834.921	696.931	-0.071	-0.079	-0.169	
5	R5b-9-B31	1020724.300	1888830.800	697.1	1020724.290	1888830.854	697.014	-0.010	0.054	-0.086	
5	R5b-9-B32	1020716.200	1888828.900	696.7	1020716.259	1888829.027	696.665	0.059	0.127	-0.035	
5	R5b-9-B33	1020712.400	1888822.700	697.6	1020712.350	1888822.761	697.234	-0.050	0.061	-0.366	Isolated over excavation of Targeted Material
5	R5b-9-B34	1020706.800	1888821.500	697.6	1020706.745	1888821.477	697.496	-0.055	-0.023	-0.104	
5	R5b-9-B35	1020705.800	1888813.100	697.6	1020705.814	1888813.099	697.578	0.014	-0.001	-0.022	
5	R5b-9-B36	1020721.800	1888809.000	695.9	1020721.863	1888809.088	695.709	0.063	0.088	-0.191	
5	R5b-9-B37	1020710.600	1888806.100	695.9	1020710.631	1888806.176	695.688	0.031	0.076	-0.212	
5	R5b-9-B38	1020727.100	1888791.800	696.6	1020727.027	1888791.683	696.535	-0.073	-0.117	-0.065	
5	R5b-9-B39	1020721.800	1888790.700	696.6	1020721.816	1888790.727	696.588	0.016	0.027	-0.012	
5	R5b-9-B4	1020758.000	1888989.100	695.9	1020757.929	1888989.109	695.892	-0.071	0.009	-0.008	
5	R5b-9-B40	1020729.500	1888782.400	697.1	1020729.456	1888782.440	696.931	-0.044	0.040	-0.169	
5	R5b-9-B41	1020723.900	1888780.700	696.8	1020723.774	1888780.712	696.593	-0.126	0.012	-0.207	
5	R5b-9-B42	1020734.100	1888779.600	697.1	1020734.034	1888779.638	697.099	-0.066	0.038	-0.001	
5	R5b-9-B43	1020719.300	1888778.500	695.9	1020719.339	1888778.424	695.777	0.039	-0.076	-0.123	
5	R5b-9-B44	1020714.800	1888772.600	695.9	1020714.741	1888772.639	695.818	-0.059	0.039	-0.082	
5	R5b-9-B45	1020719.700	1888769.500	695.9	1020719.721	1888769.536	695.874	0.021	0.036	-0.026	
5	R5b-9-B46	1020738.600	1888764.400	697.8	1020738.571	1888764.280	697.792	-0.029	-0.120	-0.008	
5	R5b-9-B47	1020723.400	1888758.100	696.2	1020723.386	1888758.151	696.031	-0.014	0.051	-0.169	
5	R5b-9-B48	1020742.800	1888748.400	697.2	1020742.854	1888748.448	697.127	0.054	0.048	-0.073	
5	R5b-9-B49	1020728.300	1888743.500	696.7	1020728.248	1888743.434	696.467	-0.052	-0.066	-0.233	
5	R5b-9-B5	1020752.200	1888987.900	695.9	1020752.255	1888987.867	695.843	0.055	-0.033	-0.057	
5	R5b-9-B50	1020734.300	1888729.400	697	1020734.281	1888729.390	696.984	-0.019	-0.010	-0.016	
5	R5b-9-B51	1020749.800	1888728.000	697.3	1020749.835	1888728.037	697.075	0.035	0.037	-0.225	
5	R5b-9-B52	1020761.000	1888717.300	697.2	1020761.007	1888717.321	696.752	0.007	0.021	-0.448	Isolated over excavation of Targeted Material
5	R5b-9-B53	1020733.900	1888713.600	695.1	1020733.978	1888713.637	695.089	0.078	0.037	-0.011	
5	R5b-9-B54	1020767.100	1888710.400	696.8	1020767.042	1888710.419	696.686	-0.058	0.019	-0.114	
5	R5b-9-B55	1020731.200	1888708.000	695.1	1020731.249	1888708.024	695.066	0.049	0.024	-0.034	
5	R5b-9-B56	1020774.300	1888703.400	696.8	1020774.384	1888703.386	696.625	0.084	-0.014	-0.175	
5	R5b-9-B57	1020737.300	1888694.400	696.2	1020737.223	1888694.409	696.089	-0.077	0.009	-0.111	
5	R5b-9-B58	1020778.000	1888686.600	696.6	1020778.028	1888686.627	696.570	0.028	0.027	-0.030	
5	R5b-9-B59	1020745.500	1888679.400	696.3	1020745.532	1888679.454	696.130	0.032	0.054	-0.170	
5	R5b-9-B6	1020751.200	1888976.600	696.8	1020751.104	1888976.568	696.431	-0.096	-0.032	-0.369	Isolated over excavation of Targeted Material
5	R5b-9-B60	1020772.000	1888670.200	697	1020772.035	1888670.207	696.991	0.035	0.007	-0.009	
5	R5b-9-B61	1020750.300	1888663.400	696.3	1020750.241	1888663.449	696.221	-0.059	0.049	-0.079	

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-9

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-9-B62	1020774.700	1888661.500	695.7	1020774.697	1888661.458	695.482	-0.003	-0.042	-0.218			
5	R5b-9-B63	1020774.000	1888652.800	696.6	1020774.068	1888652.867	696.555	0.068	0.067	-0.045			
5	R5b-9-B64	1020759.300	1888652.400	695.9	1020759.301	1888652.453	695.813	0.001	0.053	-0.087			
5	R5b-9-B65	1020766.800	1888645.100	696.3	1020766.928	1888645.115	696.242	0.128	0.015	-0.058			
5	R5b-9-B66	1020774.200	1888637.500	696.2	1020774.274	1888637.504	696.183	0.074	0.004	-0.017			
5	R5b-9-B67	1020767.600	1888635.700	696.2	1020767.655	1888635.728	696.134	0.055	0.028	-0.066			
5	R5b-9-B68	1020770.000	1888631.900	696.2	1020770.002	1888631.934	696.168	0.002	0.034	-0.032			
5	R5b-9-B69	1020774.200	1888631.700	696.2	1020774.304	1888631.722	696.198	0.104	0.022	-0.002			
5	R5b-9-B7	1020757.600	1888976.000	696.8	1020757.538	1888976.087	696.586	-0.062	0.087	-0.214			
5	R5b-9-B8	1020756.600	1888963.400	696.8	1020756.530	1888963.481	696.790	-0.070	0.081	-0.010			
5	R5b-9-B9	1020742.000	1888961.300	696.1	1020741.987	1888961.330	696.096	-0.013	0.030	-0.004			

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-10

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-10-5902b	1020586.700	1888431.400	697.5	1020586.742	1888431.486	697.256	0.042	0.086	-0.244	
5	R5b-10-5903b	1020597.400	1888442.500	696.4	1020597.500	1888442.443	696.305	0.100	-0.057	-0.095	
5	R5b-10-5904b	1020607.100	1888456.500	695.9	1020607.013	1888456.441	695.894	-0.087	-0.059	-0.006	
5	R5b-10-5905b	1020620.100	1888467.300	696.6	1020620.140	1888467.349	696.193	0.040	0.049	-0.407	Point was excavated deeper due to tree roots
5	R5b-10-5907b	1020551.100	1888381.900	697.3	1020551.057	1888381.885	697.172	-0.043	-0.015	-0.128	
5	R5b-10-5908b	1020560.300	1888392.600	697.4	1020560.276	1888392.566	697.201	-0.024	-0.034	-0.199	
5	R5b-10-5909b	1020570.800	1888402.400	696.9	1020570.897	1888402.416	696.600	0.097	0.016	-0.300	Isolated over excavation of Targeted Material
5	R5b-10-5910b	1020581.400	1888413.900	696.1	1020581.382	1888413.849	695.810	-0.018	-0.051	-0.290	Isolated over excavation of Targeted Material
5	R5b-10-5964b	1020612.900	1888452.200	695.6	1020612.831	1888452.207	695.441	-0.069	0.007	-0.159	
5	R5b-10-5970b	1020668.800	1888536.300	697.5	1020668.877	1888536.279	697.342	0.077	-0.021	-0.158	
5	R5b-10-5974b	1020660.600	1888522.100	697.1	1020660.648	1888522.089	696.765	0.048	-0.011	-0.335	Isolated over excavation of Targeted Material
5	R5b-10-5977b	1020651.800	1888509.200	696.7	1020651.739	1888509.177	696.497	-0.061	-0.023	-0.203	
5	R5b-10-5981b	1020640.400	1888494.800	697.1	1020640.498	1888494.800	696.861	0.098	0.000	-0.239	
5	R5b-10-5989b	1020635.300	1888487.200	696.9	1020635.334	1888487.099	696.823	0.034	-0.101	-0.077	
5	R5b-10-5993b	1020634.700	1888478.200	696.6	1020634.692	1888478.208	695.882	-0.008	0.008	-0.718	Isolated over excavation of Targeted Material
5	R5b-10-6001b	1020566.300	1888385.900	696.1	1020566.261	1888385.949	696.013	-0.039	0.049	-0.087	
5	R5b-10-6048b	1020592.100	1888408.700	695.3	1020592.027	1888408.708	695.054	-0.073	0.008	-0.246	
5	R5b-10-6051b	1020591.900	1888427.500	696.2	1020591.974	1888427.552	696.160	0.074	0.052	-0.040	
5	R5b-10-6056b	1020630.000	1888485.500	696.9	1020629.893	1888485.494	696.793	-0.107	-0.006	-0.107	
5	R5b-10-6081b	1020570.900	1888390.900	696	1020570.806	1888390.966	695.990	-0.094	0.066	-0.010	
5	R5b-10-B1	1020668.800	1888540.100	697.5	1020668.730	1888540.088	697.313	-0.070	-0.012	-0.187	
5	R5b-10-B10	1020632.200	1888490.200	696.9	1020632.255	1888490.189	696.781	0.055	-0.011	-0.119	
5	R5b-10-B11	1020626.700	1888486.900	696.9	1020626.669	1888486.874	696.794	-0.031	-0.026	-0.106	
5	R5b-10-B12	1020637.400	1888485.000	696.9	1020637.329	1888484.973	696.719	-0.071	-0.027	-0.181	
5	R5b-10-B13	1020635.700	1888475.900	696.6	1020635.756	1888475.875	696.555	0.056	-0.025	-0.045	
5	R5b-10-B14	1020617.700	1888470.900	696.6	1020617.695	1888470.849	696.211	-0.005	-0.051	-0.389	Point was excavated deeper due to tree roots
5	R5b-10-B15	1020622.300	1888465.600	696.6	1020622.357	1888465.669	696.039	0.057	0.069	-0.561	Point was excavated deeper due to tree roots
5	R5b-10-B16	1020604.600	1888459.300	695.9	1020604.689	1888459.254	695.744	0.089	-0.046	-0.156	
5	R5b-10-B17	1020614.400	1888449.900	695.6	1020614.330	1888449.847	695.097	-0.070	-0.053	-0.503	Excavated deeper due to equip. ruts
5	R5b-10-B18	1020594.800	1888445.500	696.4	1020594.821	1888445.492	696.395	0.021	-0.008	-0.005	
5	R5b-10-B19	1020600.200	1888441.000	696.4	1020600.279	1888440.966	696.392	0.079	-0.034	-0.008	
5	R5b-10-B2	1020665.600	1888537.500	697.5	1020665.463	1888537.443	697.403	-0.137	-0.057	-0.097	
5	R5b-10-B20	1020584.200	1888434.000	697.5	1020584.238	1888433.934	697.499	0.038	-0.066	-0.001	
5	R5b-10-B21	1020597.500	1888433.500	696.2	1020597.454	1888433.458	696.049	-0.046	-0.042	-0.151	
5	R5b-10-B22	1020597.000	1888424.000	696.2	1020597.013	1888423.931	695.994	0.013	-0.069	-0.206	
5	R5b-10-B23	1020578.200	1888417.300	696.1	1020578.294	1888417.269	696.058	0.094	-0.031	-0.042	
5	R5b-10-B24	1020595.200	1888407.500	695.3	1020595.278	1888407.446	695.052	0.078	-0.054	-0.248	

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△ Elevation -0.25 to 0.0 ft Green

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KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-10

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-10-B25	1020566.800	1888405.600	696.9	1020566.763	1888405.554	696.807	-0.037	-0.046	-0.093	
5	R5b-10-B26	1020579.300	1888405.600	696.1	1020579.286	1888405.528	696.083	-0.014	-0.072	-0.017	
5	R5b-10-B27	1020584.600	1888402.900	695.3	1020584.547	1888402.855	695.146	-0.053	-0.045	-0.154	
5	R5b-10-B28	1020574.000	1888399.800	696.9	1020573.973	1888399.843	696.240	-0.027	0.043	-0.660	Isolated over excavation of Targeted Material
5	R5b-10-B29	1020556.700	1888395.200	697.4	1020556.721	1888395.252	697.380	0.021	0.052	-0.020	
5	R5b-10-B3	1020670.800	1888536.000	697.5	1020670.790	1888536.017	697.275	-0.010	0.017	-0.225	
5	R5b-10-B30	1020577.200	1888391.500	696	1020577.160	1888391.537	695.878	-0.040	0.037	-0.122	
5	R5b-10-B31	1020547.400	1888385.100	697.3	1020547.330	1888385.112	697.194	-0.070	0.012	-0.106	Same as R4-7-B112
5	R5b-10-B32	1020568.500	1888382.000	696.1	1020568.440	1888382.032	695.997	-0.060	0.032	-0.103	
5	R5b-10-B33	1020555.900	1888380.200	697.3	1020555.854	1888380.174	697.159	-0.046	-0.026	-0.141	Same as R4-7-B115
5	R5b-10-B4	1020656.600	1888524.800	697.1	1020656.690	1888524.862	696.931	0.090	0.062	-0.169	
5	R5b-10-B5	1020663.800	1888519.300	697.1	1020663.792	1888519.327	696.890	-0.008	0.027	-0.210	
5	R5b-10-B6	1020647.400	1888511.300	696.7	1020647.374	1888511.316	696.656	-0.026	0.016	-0.044	
5	R5b-10-B7	1020657.600	1888508.100	696.7	1020657.528	1888508.069	696.678	-0.072	-0.031	-0.022	
5	R5b-10-B8	1020636.400	1888497.300	697.1	1020636.281	1888497.359	697.055	-0.119	0.059	-0.045	
5	R5b-10-B9	1020642.900	1888492.300	697.1	1020642.854	1888492.359	697.015	-0.046	0.059	-0.085	

Δ Elevation < -0.25 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-11

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS		
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation			
5	R5b-11-5961b	1020609.500	1888436.100	695.5	1020609.475	1888436.087	695.405	-0.025	-0.013	-0.095			
5	R5b-11-B1	1020610.900	1888439.200	695.5	1020610.985	1888439.231	695.303	0.085	0.031	-0.197			
5	R5b-11-B2	1020606.200	1888437.800	695.5	1020606.291	1888437.725	695.345	0.091	-0.075	-0.155			
5	R5b-11-B3	1020613.100	1888433.700	695.5	1020613.095	1888433.678	695.303	-0.005	-0.022	-0.197			
5	R5b-11-B4	1020607.800	1888432.500	695.5	1020607.887	1888432.439	695.458	0.087	-0.061	-0.042			

△ Elevation < -0.25 ft Blue
 △ Elevation -0.25 to 0.0 ft Green
 △ Elevation > 0.0 ft Red

△ Easting/Northing < or = 0.2 ft Green
 △ Easting/Northing > 0.2 ft Blue

KRESS CREEK / WEST BRANCH DUPAGE RIVER VERIFICATION POINTS
 Bottom of Targeted Material
 Reach 5b-12

DESIGN					ACTUAL			DATA COMPARISON			COMMENTS
Area	Name	Easting	Northing	Elevation	Easting	Northing	Elevation	Δ Easting	Δ Northing	Δ Elevation	
5	R5b-12-7330b	1020638.800	1888341.000	696.6	1020638.776	1888340.993	696.400	-0.024	-0.007	-0.200	
5	R5b-12-7334b	1020613.100	1888291.000	697.5	1020613.138	1888290.999	697.027	0.038	-0.001	-0.473	Isolated over excavation of Targeted Material
5	R5b-12-7335b	1020630.600	1888326.400	696.5	1020630.556	1888326.372	696.496	-0.044	-0.028	-0.004	
5	R5b-12-7339b	1020616.300	1888296.900	697.2	1020616.288	1888296.974	696.969	-0.012	0.074	-0.231	
5	R5b-12-7342b	1020625.100	1888311.500	696.7	1020625.072	1888311.582	696.497	-0.028	0.082	-0.203	
5	R5b-12-7391b	1020655.000	1888399.600	697.3	1020654.903	1888399.552	696.679	-0.097	-0.048	-0.621	Isolated over excavation of Targeted Material
5	R5b-12-7393b	1020649.200	1888385.100	695.6	1020649.248	1888385.134	695.583	0.048	0.034	-0.017	
5	R5b-12-7396b	1020646.900	1888371.900	696.4	1020646.857	1888371.912	696.358	-0.043	0.012	-0.042	
5	R5b-12-7399b	1020644.700	1888357.800	696.4	1020644.651	1888357.761	696.265	-0.049	-0.039	-0.135	
5	R5b-12-B1	1020657.100	1888403.400	697.3	1020657.058	1888403.421	697.178	-0.042	0.021	-0.122	
5	R5b-12-B10	1020637.400	1888342.200	696.6	1020637.322	1888342.124	696.366	-0.078	-0.076	-0.234	
5	R5b-12-B11	1020642.800	1888340.100	696.6	1020642.840	1888340.091	696.524	0.040	-0.009	-0.076	
5	R5b-12-B12	1020629.500	1888327.200	696.5	1020629.570	1888327.195	696.414	0.070	-0.005	-0.086	
5	R5b-12-B13	1020636.700	1888325.700	696.5	1020636.703	1888325.657	696.443	0.003	-0.043	-0.057	
5	R5b-12-B14	1020623.800	1888311.900	696.7	1020623.841	1888311.885	696.555	0.041	-0.015	-0.145	
5	R5b-12-B15	1020628.900	1888310.000	696.7	1020628.828	1888310.106	696.673	-0.072	0.106	-0.027	
5	R5b-12-B16	1020615.800	1888298.100	697.2	1020615.769	1888298.031	696.518	-0.031	-0.069	-0.682	Isolated over excavation of Targeted Material
5	R5b-12-B17	1020620.500	1888296.400	697.2	1020620.361	1888296.335	697.141	-0.139	-0.065	-0.059	
5	R5b-12-B18	1020612.400	1888292.000	697.5	1020612.480	1888291.899	696.835	0.080	-0.101	-0.665	Isolated over excavation of Targeted Material
5	R5b-12-B19	1020617.100	1888288.100	697.5	1020617.200	1888288.100	697.403	0.100	0.000	-0.097	
5	R5b-12-B2	1020653.700	1888399.700	697.3	1020653.684	1888399.754	696.603	-0.016	0.054	-0.697	Isolated over excavation of Targeted Material
5	R5b-12-B20	1020611.900	1888287.200	697.5	1020612.070	1888287.218	697.395	0.170	0.018	-0.105	
5	R5b-12-B3	1020658.100	1888397.900	697.3	1020657.991	1888397.835	697.112	-0.109	-0.065	-0.188	
5	R5b-12-B4	1020648.300	1888385.900	695.6	1020648.344	1888385.846	695.588	0.044	-0.054	-0.012	
5	R5b-12-B5	1020654.100	1888384.100	695.6	1020654.118	1888384.189	695.582	0.018	0.089	-0.018	
5	R5b-12-B6	1020644.700	1888372.300	696.4	1020644.666	1888372.288	696.286	-0.034	-0.012	-0.114	
5	R5b-12-B7	1020650.600	1888370.500	696.4	1020650.601	1888370.486	696.170	0.001	-0.014	-0.230	
5	R5b-12-B8	1020643.200	1888358.900	696.4	1020643.305	1888358.868	696.175	0.105	-0.032	-0.225	
5	R5b-12-B9	1020647.300	1888356.600	696.4	1020647.263	1888356.560	696.381	-0.037	-0.040	-0.019	

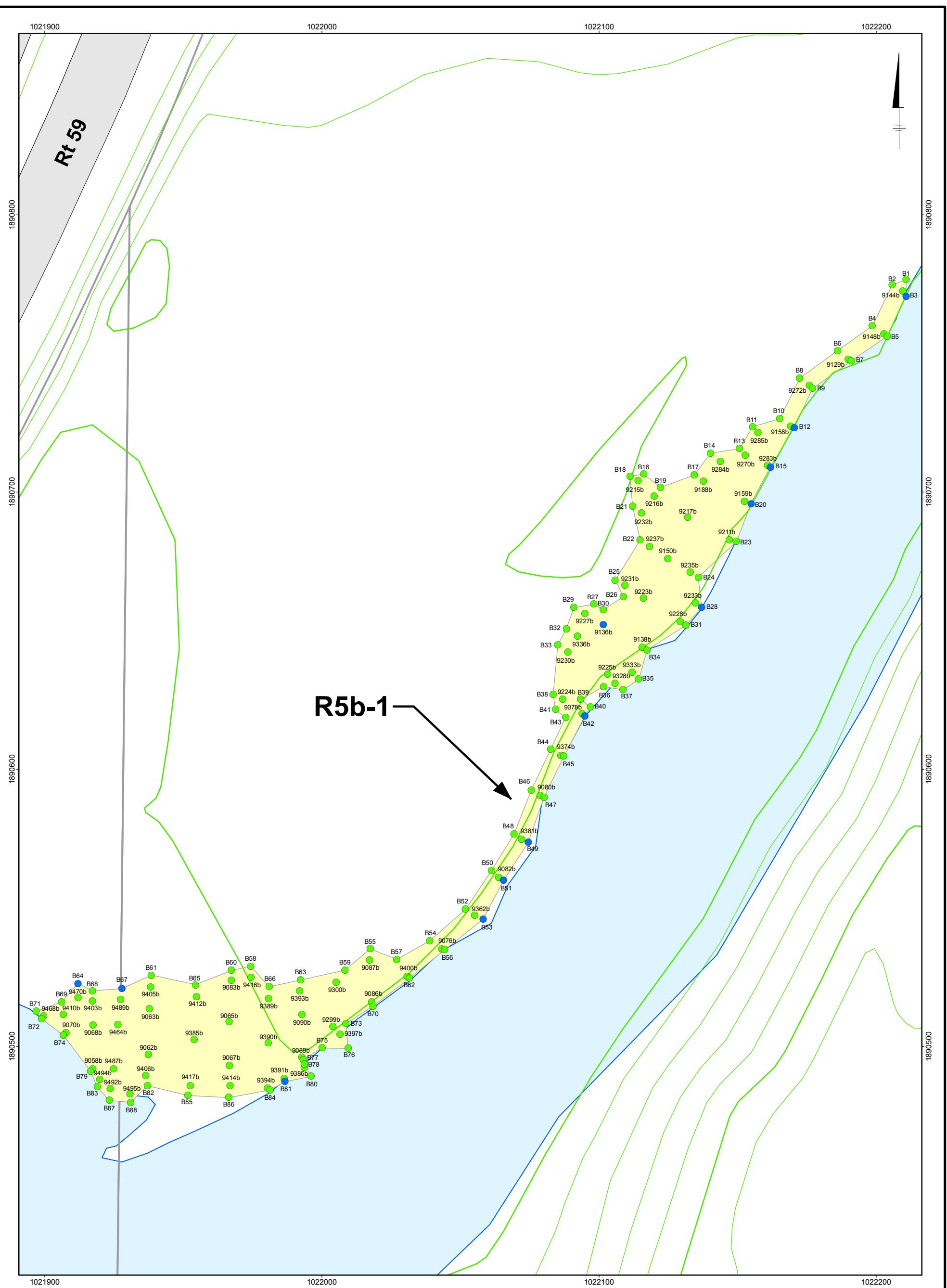
Δ Elevation < -0.25 ft Blue

Δ Easting/Northing < or = 0.2 ft Green

Δ Elevation -0.25 to 0.0 ft Green

Δ Easting/Northing > 0.2 ft Blue

Δ Elevation > 0.0 ft Red

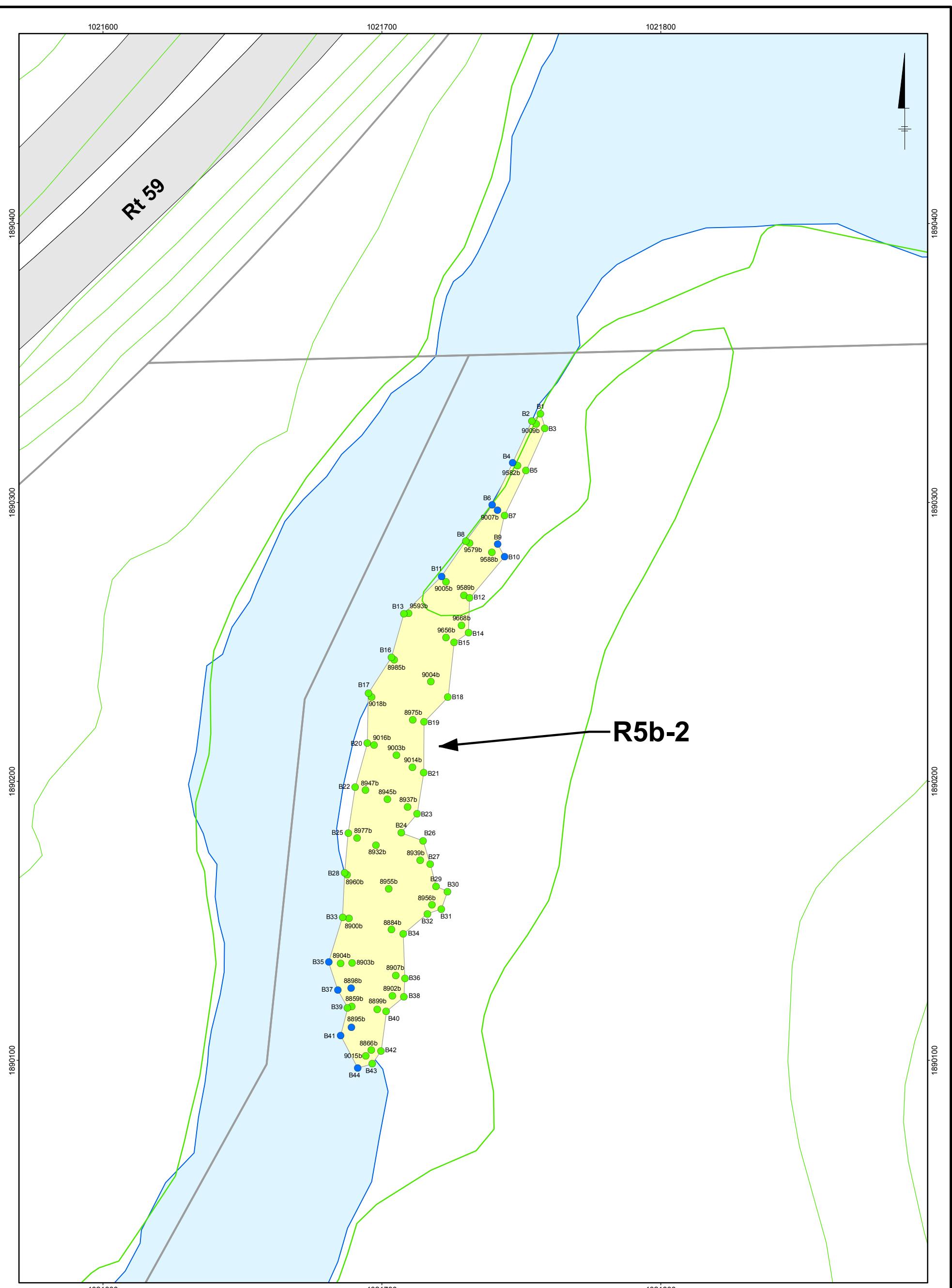


DATE: 11/03/2006
PREPARED BY: Jerry Krane

TRONOX LLC	
KRESS CREEK/WEST BRANCH DUPAGE RIVER	
REMEDIATION TRACKING SYSTEM	
GPS VERIFICATION POINTS	
BOTTOM OF TARGETED MATERIAL	
REACH 5b	
(Figures Numbered North to South)	

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction

**FIGURE
1 of 7**

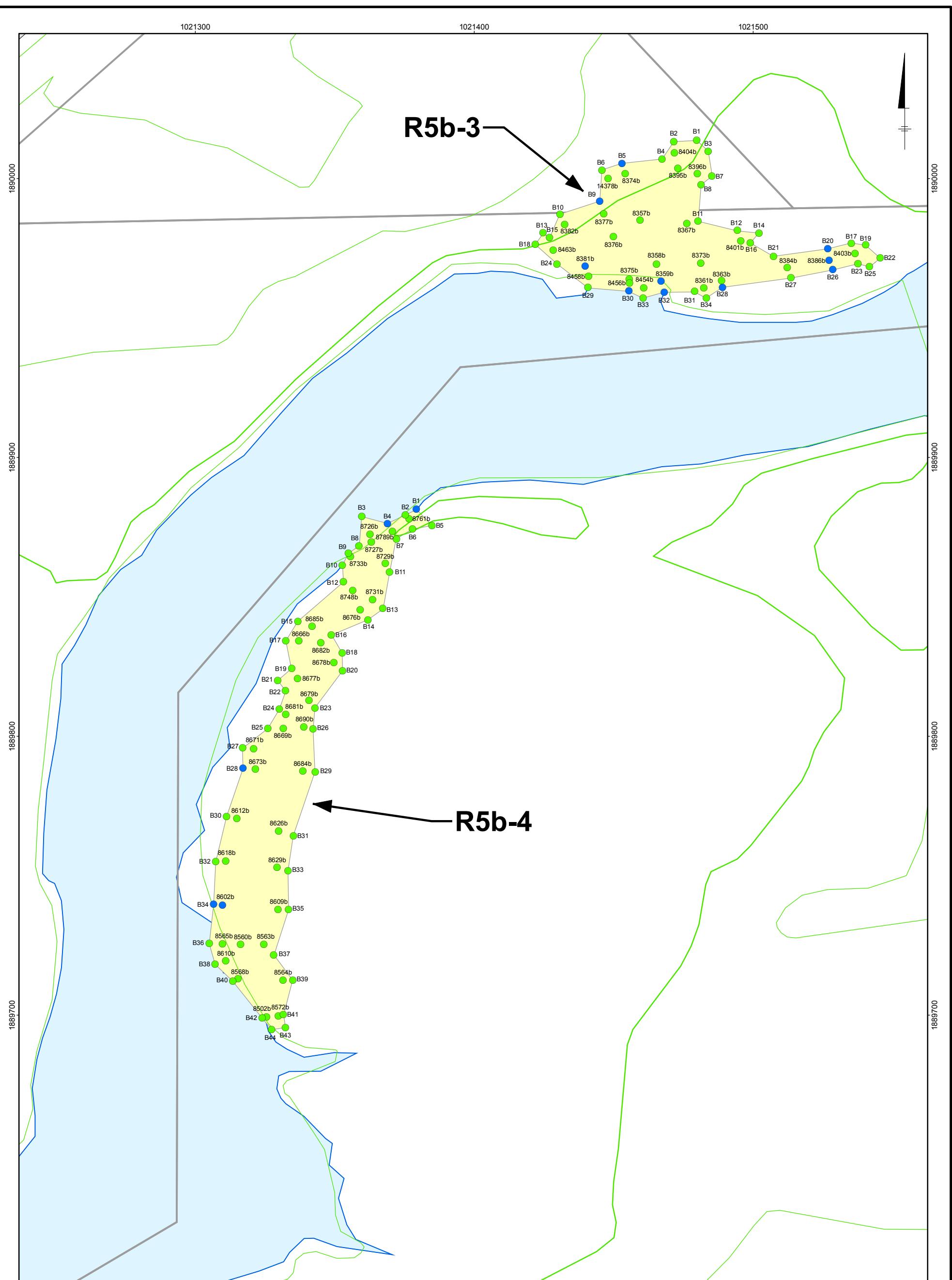


DATE: 11/03/2006
PREPARED BY: Jerry Krane

TRONOX LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF TARGETED MATERIAL
REACH 5b
(Figures Numbered North to South)

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction

**FIGURE
2 of 7**



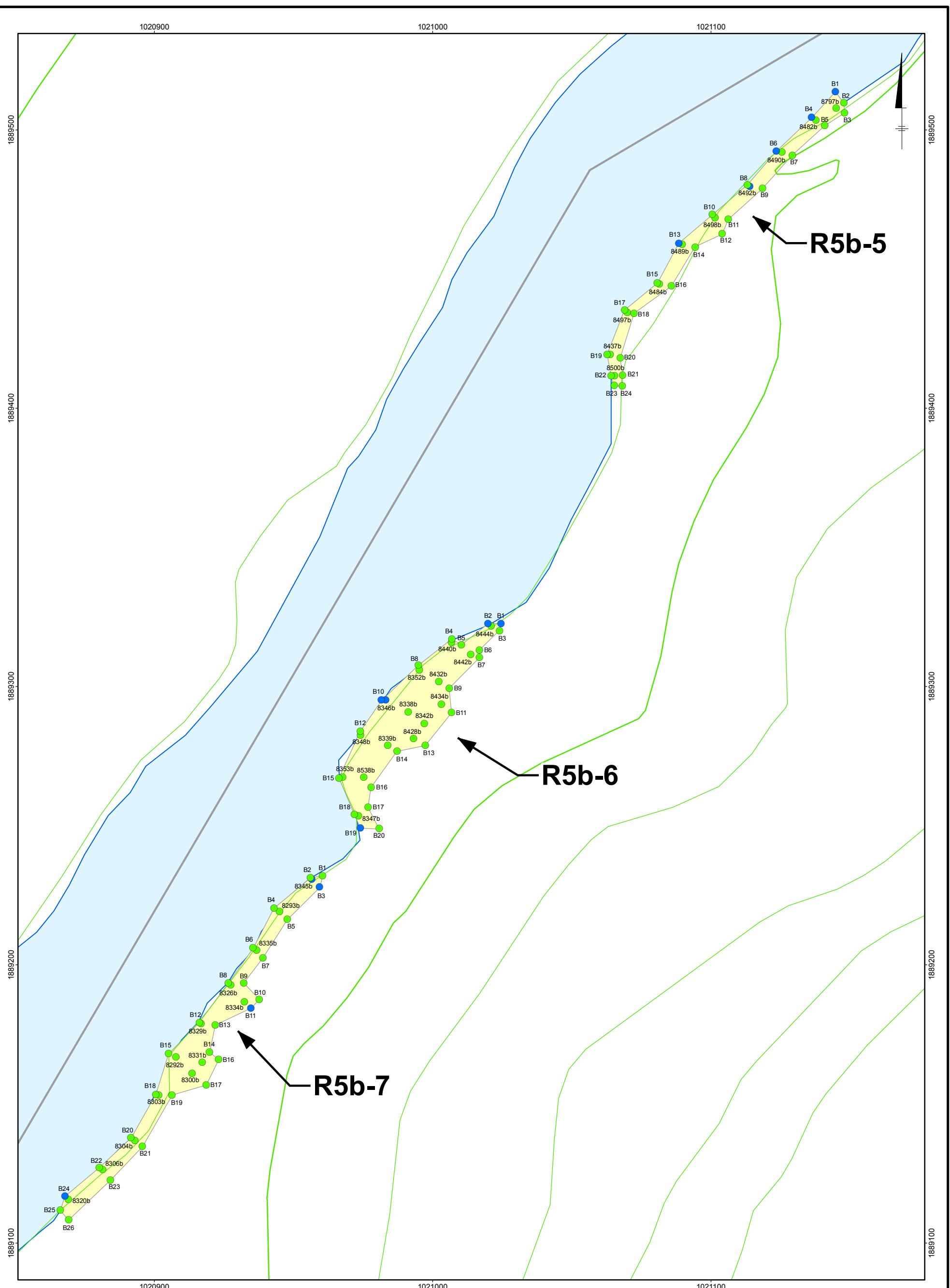
DATE: 11/03/2006
PREPARED BY: Jerry Krane

TRONOX LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM

GPS VERIFICATION POINTS
BOTTOM OF TARGETED MATERIAL
REACH 5b
(Figures Numbered North to South)

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction

**FIGURE
3 of 7**



LEGEND:

- 10 FOOT TOPOGRAPHIC CONTOUR
- 2 FOOT TOPOGRAPHIC CONTOUR
- PROPERTY LINE

0 25 50 Feet

DATE: 11/03/2006
PREPARED BY: Jerry Krane

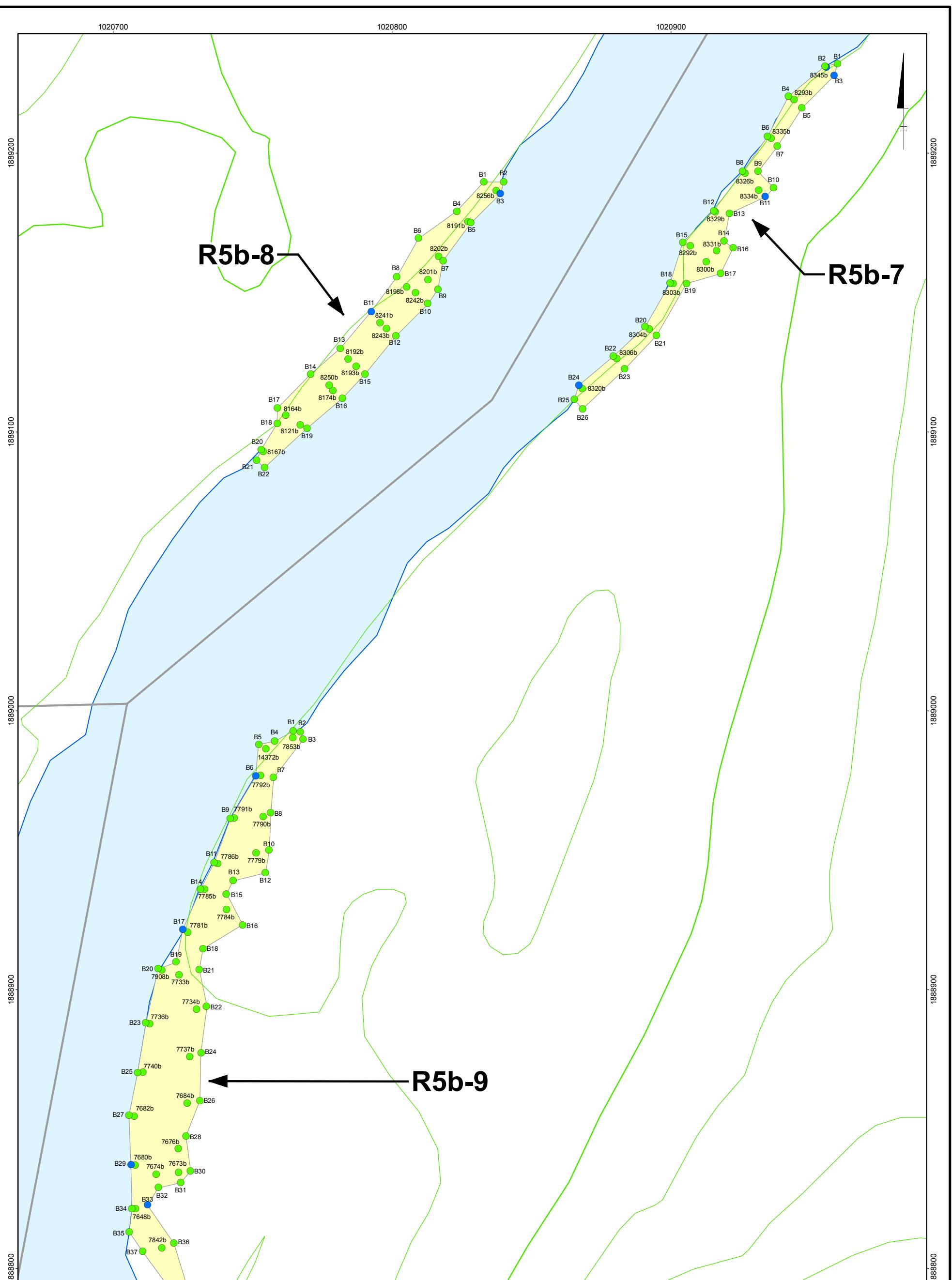
SURVEY LOCATION:
 LOCATION NOT SURVEYED
ELEVATION DIFFERENCE (ACTUAL VS DESIGN)
● > 0.00
● ≤ 0.00 to -0.25
● < -0.25

NOTE:
 1. COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
 DATUM: NAD 83
 UNITS: FEET

TRONOX LLC KRESS CREEK/WEST BRANCH DUPAGE RIVER REMEDIATION TRACKING SYSTEM GPS VERIFICATION POINTS BOTTOM OF TARGETED MATERIAL REACH 5b (Figures Numbered North to South)
--

BBL
ENVIRONMENTAL SERVICES, INC.
 Remedial Management & Construction

**FIGURE
4 of 7**

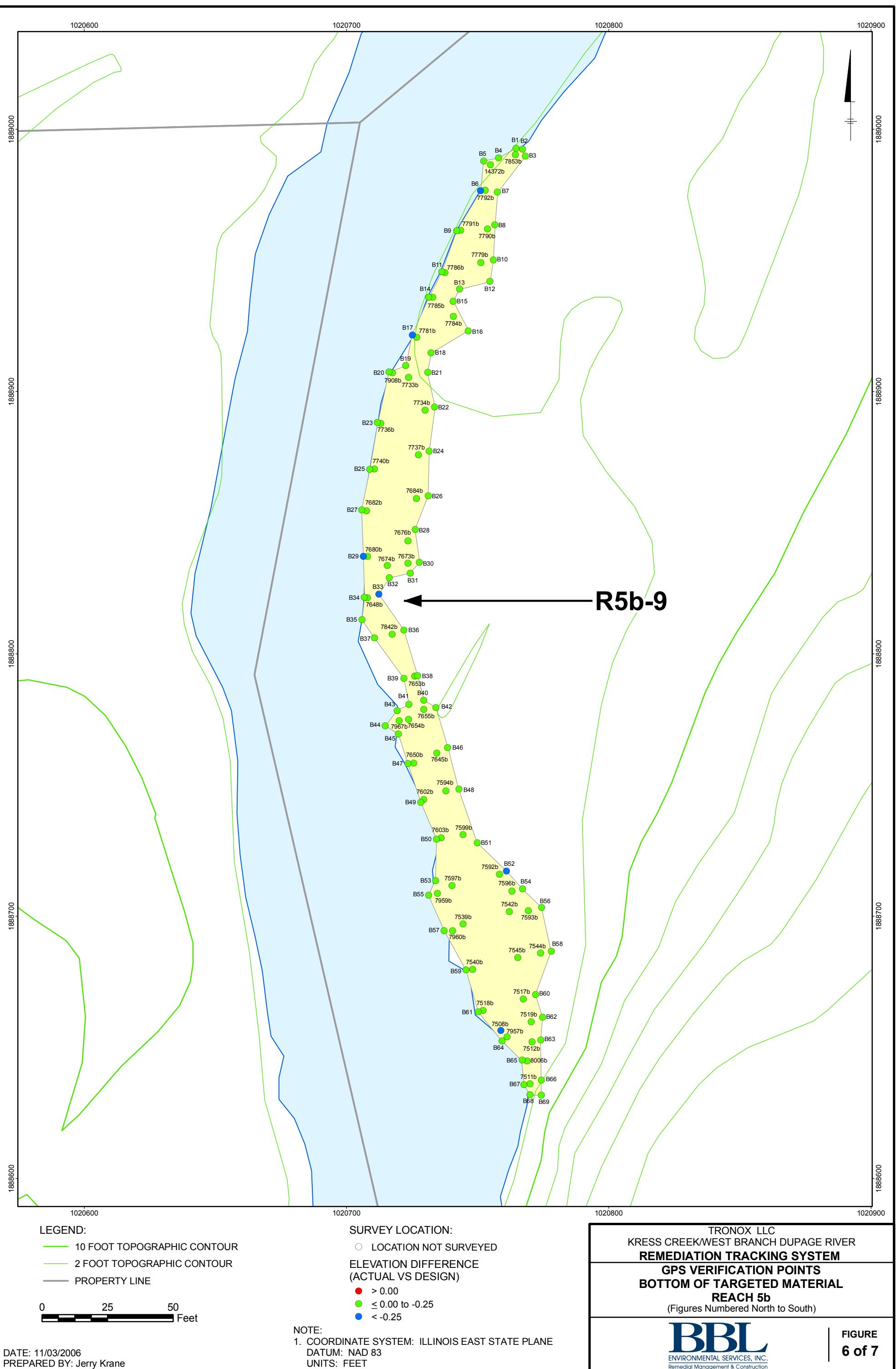


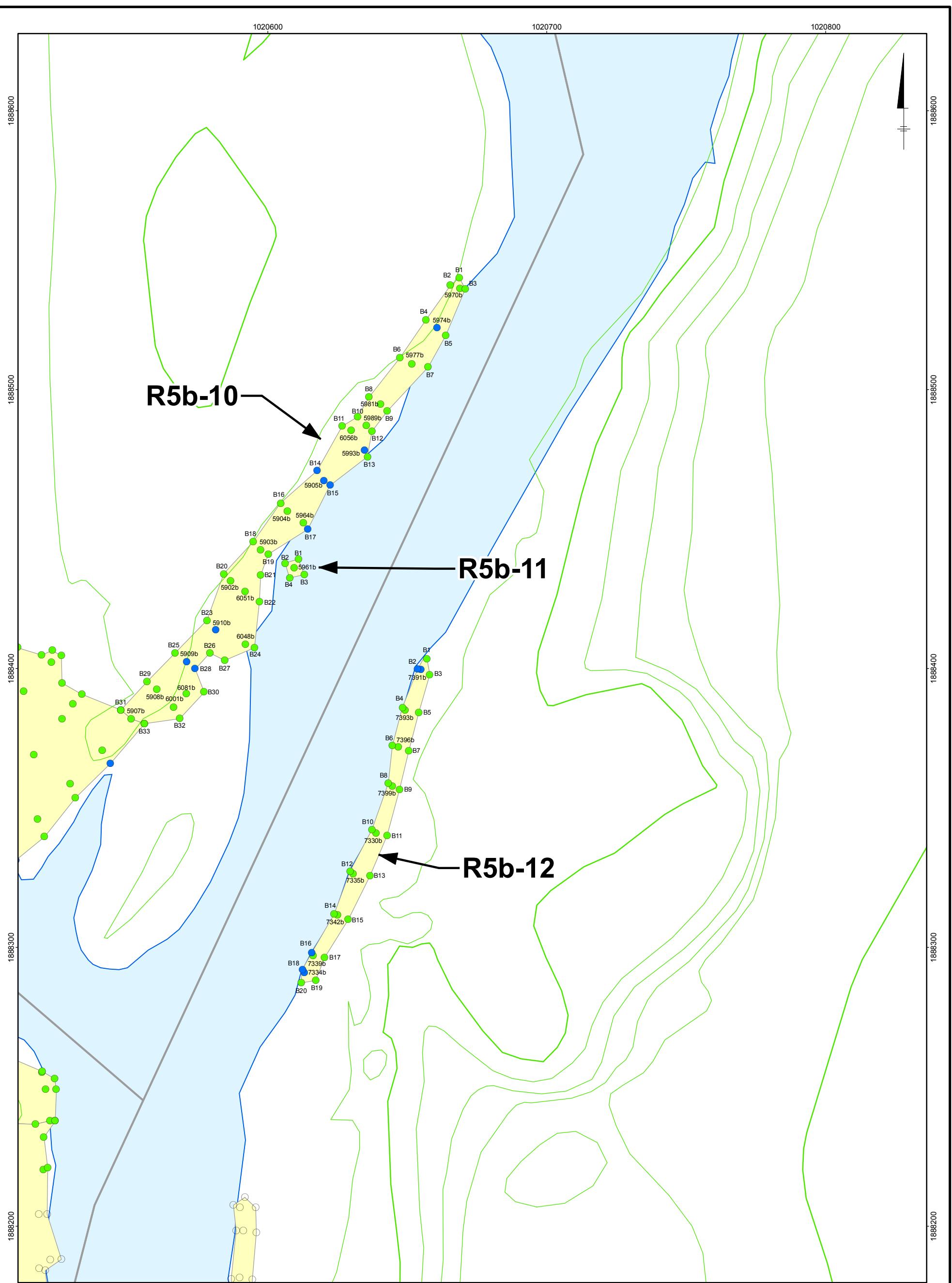
NOTE:

- COORDINATE SYSTEM: ILLINOIS EAST STATE PLANE
DATUM: NAD 83
UNITS: FEET

TRONOX LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF TARGETED MATERIAL
REACH 5b
(Figures Numbered North to South)

BBL
ENVIRONMENTAL SERVICES, INC.
Remedial Management & Construction





DATE: 11/03/2006
PREPARED BY: Jerry Krane

TRONOX LLC
KRESS CREEK/WEST BRANCH DUPAGE RIVER
REMEDIATION TRACKING SYSTEM
GPS VERIFICATION POINTS
BOTTOM OF TARGETED MATERIAL
REACH 5b
(Figures Numbered North to South)



ARCADIS

Appendix E

Water Column Monitoring Data
Summary for Reach 5B

Appendix E
Water Column Monitoring Data Summary for Reach 5B

Date	Reach	Time	Upstream R5B - Wilson St. (NTU)	Upstream R5B - Gary's Mill Rd. (NTU)	Downstream R5B - R5C staging area (NTU)	Downstream - Highest Upstream Δ NTU
8/10/06	R5B	pm	11.1	17.4	4.9	-12.5
8/11/06	R5B	am	20.4	19.0	6.5	-13.9
8/11/06	R5B	am	7.0	17.7	7.4	-10.3
8/12/06	R5B	am	8.0	21.7	3.4	-18.3
8/12/06	R5B	pm	5.6	16.9	10.9	-6.0
8/13/06	R5B	pm	10.1	17.8	4.9	-12.9
8/14/06	R5B	am	25.1	18.9	2.3	-22.8
8/14/06	R5B	pm	8.5	16.9	3.5	-13.4
8/15/06	R5B	am	14.6	19.5	9.1	-10.4
8/15/06	R5B	pm	8.5	15.5	3.1	-12.4
8/16/06	R5B	am	14.9	31.5	4.8	-26.7
8/16/06	R5B	pm	15.2	32.6	4.9	-27.7
8/17/06	R5B	am	11.4	31.0	5.3	-25.7
8/17/06	R5B	pm	4.9	13.7	1.0	-12.7
8/18/06	R5B	am	4.9	22.1	26.8	4.7
8/18/06	R5B	pm	12.7	26.7	16.9	-9.8
8/19/06	R5B	am	82.3	51.3	28.3	-54.0
8/19/06	R5B	pm	45.3	109.0	39.7	-69.3
8/20/06	R5B	am	41.0	40.0	14.9	-26.1
8/21/06	R5B	am	46.1	38.9	11.6	-34.5
8/21/06	R5B	pm	57.7	30.7	12.9	-44.8
8/22/06	R5B	am	36.2	82.6	42.1	-40.5
8/22/06	R5B	pm	36.6	72.4	43.6	-28.8
8/23/06	R5B	am	34.0	155.0	13.4	-141.6
8/23/06	R5B	pm	22.1	394.0	10.6	-383.4
8/24/06	R5B	am	818.0	651.0	596.0	-222.0
8/24/06	R5B	pm	847.0	603.0	507.0	-340.0
8/25/06	R5B	am	295.0	369.0	244.0	-125.0
8/25/06	R5B	pm	291.0	282.0	99.8	-191.2
8/26/06	R5B	am	523.0	623.0	236.0	-387.0
8/26/06	R5B	pm	58.2	557.0	434.0	-123.0
8/27/06	R5B	am	231.0	350.0	54.8	-295.2
8/27/06	R5B	pm	147.0	238.0	18.6	-219.4
8/28/06	R5B	am	820.0	536.0	21.3	-798.7
8/28/06	R5B	pm	954.0	706.0	765.0	-189.0
8/29/06	R5B	am	676.0	835.0	813.0	-22.0
8/29/06	R5B	pm	635.0	771.0	702.0	-69.0
8/30/06	R5B	am	263.0	406.0	286.0	-120.0
8/30/06	R5B	pm	240.0	321.0	231.0	-90.0

Appendix E
Water Column Monitoring Data Summary for Reach 5B

Date	Reach	Time	Upstream R5B - Wilson St. (NTU)	Upstream R5B - Gary's Mill Rd. (NTU)	Downstream R5B - R5C staging area (NTU)	Downstream - Highest Upstream Δ NTU
8/31/06	R5B	am	587.0	738.0	557.0	-181.0
8/31/06	R5B	pm	525.0	449.0	428.0	-97.0
9/1/06	R5B	am	523.0	486.0	403.0	-120.0
9/1/06	R5B	pm	408.0	498.0	436.0	-62.0
9/2/06	R5B	am	8.2	95.6	2.8	-92.8
9/2/06	R5B	pm	5.6	161.7	10.1	-151.6
9/3/06	R5B	am	23.9	501.0	8.4	-492.6
9/3/06	R5B	pm	33.6	187.3	12.2	-175.1
9/4/06	R5B	am	596.0	756.0	708.0	-48.0
9/4/06	R5B	pm	298.0	694.0	628.0	-66.0
9/5/06	R5B	am	657.0	900.0	633.0	-267.0
9/5/06	R5B	pm	748.0	956.0	855.0	-101.0
9/6/06	R5B	am	729.0	902.0	572.0	-330.0
9/6/06	R5B	pm	987.0	977.0	942.0	-45.0
9/7/06	R5B	am	928.0	798.0	774.0	-154.0
9/7/06	R5B	pm	992.0	706.0	617.0	-375.0
9/8/06	R5B	am	281.0	497.0	294.0	-203.0
9/8/06	R5B	pm	143.0	267.0	154.0	-113.0
9/9/06	R5B	am	238.0	295.0	225.0	-70.0
9/9/06	R5B	pm	186.0	247.0	141.0	-106.0
9/10/06	R5B	am	314.0	484.0	258.0	-226.0
9/10/06	R5B	pm	339.0	365.0	342.0	-23.0
9/11/06	R5B	am	986.0	382.0	695.0	-291.0
9/11/06	R5B	pm	673.0	515.0	414.0	-259.0
9/12/06	R5B	am	973.0	985.0	981.0	-4.0
9/12/06	R5B	pm	976.0	966.0	951.0	-25.0
9/13/06	R5B	am	612.0	741.0	726.0	-15.0
9/13/06	R5B	pm	600.0	829.0	739.0	-90.0
9/14/06	R5B	am	608.0	735.0	526.0	-209.0
9/14/06	R5B	pm	530.0	956.0	537.0	-419.0
9/15/06	R5B	am	141.0	498.0	478.0	-20.0
9/15/06	R5B	pm	123.0	456.0	431.0	-25.0
9/16/06	R5B	am	58.1	231.0	174.0	-57.0
9/16/06	R5B	pm	83.4	311.0	151.0	-160.0
9/17/06	R5B	am	182.0	296.0	151.0	-145.0
9/17/06	R5B	pm	136.0	315.0	162.0	-153.0
9/18/06	R5B	am	349.0	704.0	327.0	-377.0
9/18/06	R5B	pm	72.0	182.0	186.0	4.0
9/19/06	R5B	am	107.0	147.0	141.0	-6.0
9/19/06	R5B	pm	156.0	201.0	148.0	-53.0
9/20/06	R5B	am	94.4	109.0	105.0	-4.0
9/20/06	R5B	pm	27.5	190.0	81.3	-108.7
9/21/06	R5B	am	18.7	202.0	151	-51.0
9/21/06	R5B	pm	255.0	229.0	210	-45.0
9/22/06	R5B	am	93.6	238	229	-9.0
9/22/06	R5B	pm	60.5	204	98.1	-105.9

Appendix E
Water Column Monitoring Data Summary for Reach 5B

Date	Reach	Time	Upstream R5B - Wilson St. (NTU)	Upstream R5B - Gary's Mill Rd. (NTU)	Downstream R5B - R5C staging area (NTU)	Downstream - Highest Upstream Δ NTU
9/23/06	R5B	am	802	941	936	-5.0
9/23/06	R5B	pm	763	900	855	-45.0
9/24/06	R5B	am	588	520	490	-98.0
9/24/06	R5B	pm	673	501	456	-217.0
9/25/06	R5B	am	421	561	481	-80.0
9/25/06	R5B	pm	558	603	433	-170.0
9/26/06	R5B	am	912	364	300	-612.0
9/26/06	R5B	pm	810	403	321	-489.0
9/27/06	R5B	am	358	467	411	-56.0
9/27/06	R5B	pm	881	381	361	-520.0
9/28/06	R5B	am	804	715	685	-119.0
9/28/06	R5B	pm	921	622	583	-338.0
9/29/06	R5B	am	731	451	347	-384.0
9/29/06	R5B	pm	703	388	276	-427.0
9/30/06	R5B	am	720	800	733	-67.0
9/30/06	R5B	pm	640	831	703	-128.0
10/1/06	R5B	n/a	No sampling required: no "in-stream" activity.			
10/2/06	R5B	am	771.0	866.0	643.0	-223.0
10/2/06	R5B	pm	826.0	783.0	701.0	-125.0
10/3/06	R5B	n/a	No sampling required: no "in-stream" activity.			
10/4/06	R5B	n/a	No sampling required: no "in-stream" activity.			
10/5/06	R5B	pm	327.0	433.0	402.0	-31.0
10/6/06	R5B	am	835.0	375.0	265.0	-570.0
10/6/06	R5B	pm	750.0	521.0	326.0	-424.0
10/7/06	R5B	am	697.0	367.0	326.0	-371.0
10/7/06	R5B	pm	771.0	452.0	306.0	-465.0
10/8/06	R5B	n/a	No sampling required: no "in-stream" activity.			
10/9/06	R5B	am	981.0	977.0	906.0	-75.0
10/9/06	R5B	pm	993.0	402.0	314.0	-679.0
10/10/06	R5B	am	348.0	304.0	311.0	-37.0
10/10/06	R5B	pm	633.0	481.0	426.0	-207.0
10/11/06	R5B	am	496.0	580.0	548.0	-32.0
10/11/06	R5B	pm	521.0	463.0	433.0	-88.0
10/12/06	R5B	am	965.0	612.0	575.0	-390.0
10/12/06	R5B	pm	938.0	544.0	486.0	-452.0
10/13/06	R5B	am	766.0	329.0	323.0	-443.0
10/14/06	R5B	n/a	No sampling required: no "in-stream" activity.			
10/15/06	R5B	n/a	No sampling required: no "in-stream" activity.			
10/16/06	R5B	am	719.0	221.0	210.0	-509.0
10/16/06	R5B	pm	486.0	310.0	296.0	-190.0

ARCADIS

Appendix F

Sampling Data Reusable Overburden
for Reach 5B

KC 084*Transmitted via Hand Delivery*

BBL Environmental Services, Inc.
 800 Weyrauch St., West Chicago, IL 60185
 Field Office No. :(630) 293-7695

To: Mark Krippel
 Tronox LLC
 800 Weyrauch Street
 West Chicago, IL 60185

Date: September 19, 2006
 File: 71020.001
 Kress Creek/West Branch Remedial Action, Reach 5B
 West Chicago, IL

We are sending you: herewith under separate cover
 drawings letters other _____

If material received is not as listed, please notify us at once.

Quantity	Identifying Numbers #	Title	Action*
Reach 5B		Reach 5B - Overburden Lift Sample Results	
1	Pile # WDR-R5B-OB1	WDR-R5B-OB1-A through WDR-R5B-OB1-F (and one QC sample)	I
2	09/19/06	Overburden Piles Tracking Spreadsheet for 2006 (dated 09/19/06) - UPDATED 06/03/08	I

*Action letter code: R - review N - reviewed and noted I - for your information
 S - resubmit J - rejected Y - for your approval

Comments:

Sincerely,

BBL ENVIRONMENTAL SERVICES, INC.

Michael F. Savage
 Michael F. Savage, P.E.
 Senior Engineer II

MFS/mfs
 Enclosures

cc: Mark Schmitt, Sevenson

OVERBURDEN PILE SAMPLING

Excavation Area: West Branch of the DuPage River, Reach 5B

Date Sampled: 9/8/2006

Number of Samples
Required Per SOP 214:
7

PILE # : WDR-R5B-OB1

Est. Volume of Pile in Cubic Yards: 140

Sample #	Total Radium in pCi/g (Th 232 + Ra 226)	QC Sample Dup. Tot. Rad. in pCi/g (Th 232 + Ra 226)	2 sigma uncertainty (Th 232)	2 sigma uncertainty (Ra 226)	S_2	S_{dup}
WDR-R5B-OB1-A	3.7					
WDR-R5B-OB1-B	4.0					
WDR-R5B-OB1-C	3.3					
WDR-R5B-OB1-D	3.5					
WDR-R5B-OB1-E	3.2					
WDR-R5B-OB1-F	3.3					
WDR-R5B-OB1-QC	-----	2.9	0.3	0.1	0.2	

Number of Samples (n) 6

$$S_{dup} = \sqrt{S_1^2 + S_2^2} = 0.34$$

Average (Mean of the sample population) (\bar{X}) 3.5

Average of samples is <7.2 pCi/g, Proceed with Confidence Level Check described in
SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1) 0.3

"t" value
2.015

U_α (True Mean) = (\bar{X}) + (t * (S_1 / \sqrt{n}))

Where "t" is a statistic used for small sample tests
of hypotheses (the Student Distribution), from
SOP No. KMS-102, Attachment 10.6

Release Criteria 7.2

$U_\alpha < \text{Release Criteria?}$

SAMPLES TESTED MEET 95% CONFIDENCE LEVEL -
LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE
AS ONSITE BACKFILL PER SOP-214

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of
the sample population, per SOP 214, paragraph 12.1

$$3 \times S_{dup} = 1.02$$

$$\begin{aligned} \text{Mean} + 3 S_{dup} &= 4.5 \\ \text{Mean} - 3 S_{dup} &= 2.5 \end{aligned}$$

QC < (Mean + 3 S_{dup})? O.K.
QC > (Mean - 3 S_{dup})? O.K.

REVIEWED: BBLES/SES

R. Moore 9/14/06 / MFSavage 9/14/06
Name/date

APPROVED: OFFSITES MANAGER:

P. Martin 9-14-06
Name/date

TRONOX LLC

Remedial Action at the Kress Creek/West Branch of the DuPage River Project, West Chicago, IL

Reaches 3A, 3B and 4 and Reach 5E

Overburden Piles Tracking Spreadsheet for 2006

Prepared By: ARCADIS on 06/03/2008

ARCADIS

Appendix G

Imported Material Sampling Data



ARCADIS
800 Weyrauch Street
West Chicago
Illinois 60185
Tel 630.293.7695
Fax 630.293.7719

MEMO

To:
File

Copies:

From:
Michael F. Savage

Date: ARCADIS Project No.:
July 15, 2008 B0071020.0000

Subject:
Kress Creek/West Branch Remedial Action Project, DuPage County, Illinois
Reach 5B Final Completion Report
Appendix G - Imported Material Sampling Data

The purpose of this memo is to summarize the Imported Material Sampling Data for the Reach 5B Final Completion Report. As a clarification, the material used for backfill and topsoil throughout Reach 5B was the wetland topsoil that was excavated from the Forest Preserve District of DuPage County's deep over-wintering pool project on Forest Preserve property within Reach 5B and that material is not classified as "imported". Similarly, the boulders used for the restoration applications in Reach 5B came from the deep over-wintering pool and therefore were not classified as "imported".

The materials that were imported for use in the restoration of Reach 5B were river rock used for bank restoration. The documentation for the identified source of materials and radiological testing of the river rock is as follows:

- Transmittal No. KC 068 dated March 30, 2006 includes the Kerr-McGee Gamma Report for the river rock sample from the supplier, Earth Inc. in Bartlett, IL.
- Transmittal No. KC 104 dated March 15, 2007 has the material source table for river rock and the material quantity summary sheet for river rock.
- Quantity Summary Sheet for River Rock used in Reaches 5A, 1 & 2 during 2005

Note: In SOP-220 Off-Site Borrow Sampling in the Common Scoping and Planning Documents, Section 2 states that samples from off-site borrow sources will be obtained for every 10,000 cubic yards of borrow soil used. The attached quantity summary sheet for river rock in 2006 shows the total river rock used in 2006 on the Kress Creek/West Branch Project was 3,333 cubic yards. The quantity summary sheet for river rock in 2005 shows the total river rock used on the project was 885. Therefore a total of 4,218 cubic yards of river rock has been used on the project through 2006, which confirms that the initial radiological sample noted above is still representative of the river rock used.

KC 068

Transmitted via Hand Delivery

BBL Environmental Services, Inc.
800 Weyrauch St., West Chicago, IL 60185
Field Office No. :(630) 293-7695

To: Mark Krippel
Tronox LLC
800 Weyrauch Street
West Chicago, IL 60185

Date: March 30, 2006
File: 71014.002
Kress Creek Remedial Action, Reach 5A
West Chicago, IL

We are sending you: herewith under separate cover
 drawings letters other _____

If material received is not as listed, please notify us at once.

Quantity	Identifying Numbers #	Title	Action*
1	Sec 02200 2.1 C	Backfill Test RAD Report-Clay, Fill, River Rock	I
1	Sec 02200 2.1 C	Backfill Test Sieve Report-Clay & Fill	I
1	Sec 02200 2.1 C	Backfill Test Analytical Report (RCRA HAZ Characteristics) Clay & Fill	I
N/A	Sec 02200 1.6 C	Backfill Material Source (See Comments Below)	I

*Action letter code: R - review N - reviewed and noted I - for your information
S - resubmit J - rejected Y - for your approval

Comments: The source for Fill & Clay Backfill is Art Lootens & Son Inc. 0S551 Joliet Rd. West Chicago IL 60185

The source for River Rock Backfill is Earth Inc. 455 West Bartlett Rd. Bartlett IL 60103

Sincerely,

BBL ENVIRONMENTAL SERVICES, INC.

Michael F. Savage

Michael F. Savage, P.E.
Senior Engineer II

MFS/mfs
Enclosures

cc: Mark Schmitt, Sevenson

Configuration : DKA200:[GAMMA..SCUSR.ARCHIVE]SMP_RIVERROCK071405_GE1_FVSU_88092.CNF;1

---- Sample Information ----

Sample Title : River Rock Earth Inc. Bartlett
Sample ID : riverrock071405 Sample Quantity : 1.61000E+03 gram
Sample Type : Dry weight Sample Geometry :
Sample Number : 88092 Specrm Collector : ROB MADDOX
Analyzed By :

---- Sample Decay/Count Information ----

Sample Date : 14-JUL-2005 00:00:00 Acquisition date : 14-JUL-2005 12:41:17
Decay time : 0 12:41:17.34 % dead time : 0.0%
Elapsed live time: 0 00:45:00.00 Elapsed real time: 0 00:45:00.68

---- Detector Parameters ----

Energy cal. time : 9-FEB-2005 11:15:05. Energy cal. oper.: RAY LANCASTER
Detector name : GE1 Counting geometry: FVSU
Effic. cal. time : 9-FEB-2005 13:19:57. Effic. cal. oper.: RAY LANCASTER

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/gram)	Act error	MDA (pCi/gram)	MDA error	Act/MDA
K-40	4.682E+00	6.711E-01	7.018E-02	7.194E-03	66.713
RA-226	1.778E-01	3.067E-02	7.096E-02	1.101E-02	2.505
U-238	3.176E-01	2.130E-01	3.184E-01	3.996E-02	0.997

---- Non-Identified Nuclides ----

Nuclide	Key-Line		MDA (pCi/gram)	MDA error	Act/MDA
	Activity (pCi/gram)	K.L. Ided			
TH-232	1.438E-01	+	1.201E-01	1.189E-02	1.197

 7-14-05


ARCADIS BBLES
Infrastructure, environment, facilities
Transmittal Letter

To:
 Mark Krippel
 Tronox LLC
 800 Weyrauch Street
 West Chicago, IL 60185

Copies:
 Rick Elia, Sevenson (1) copy

ARCADIS U.S., Inc.
 800 Weyrauch Street
 West Chicago
 Illinois 60185
 Tel 630.293.7695
 Fax 630.293.7719

KC 104

From:
 Mike Savage

Date:
 March 15, 2007 *9:10 A*

Subject:
 Kress Creek/West Branch Remedial Action
 Reaches 3A, 3B, 4, 5B and 5C

ARCADIS BBL Project No.:
 B0071018.0001

We are sending you:
 Attached

Under Separate Cover Via _____ the Following Items:

- | | | | |
|---|----------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Shop Drawings | <input type="checkbox"/> Plans | <input type="checkbox"/> Specifications | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> Prints | <input type="checkbox"/> Samples | <input type="checkbox"/> Copy of Letter | <input type="checkbox"/> Reports |
| <input checked="" type="checkbox"/> Other: Required Submittals for 2006 Remedial Action Work in Reaches 3A, 3B, 4 , 5B and 5C | | | |

Copies	Date	Drawing No.	Rev.	Description	Action*
1	03/15/07	Doc 300, Sect. 01340		Contractor's Submittals Status Report	I
1	12/14/06	Doc 300, Sect. 01340		Marked up "Summary of Potential Submittal Requirements to Kerr-McGee by the Contractor", based on review with Jeff Williams of Tronox on 12/14/06	I
1	2006	Doc. 200, SOP WCP 100		2006 Training Summary Matrix	I
1	2006	Doc 300, Sect. 02200		Backfill and restoration material (stone) sources <i>[Redacted]</i>	I
1	2006	Doc. 300, Sect. 02200		Summary table of quantities of targeted materials shipped to the REF, and quantities of clay fill, topsoil, river rock, CM-6 stone, CM-11 stone, RR3 rip rap, RR6 rip rap, calcium lime, FA-2 sand, and boulders utilized in 2006	I
1	May and June 2006	Doc. 300, Sect. 02200		Compaction test reports	I
1	2006	Doc 300, Sect. 01560		Waste Management landfill disposal tickets	I

Action*

- A Approved
 AN Approved As Noted
 AS As Requested
 Other:

- CR Correct and Resubmit
 F File
 FA For Approval

- Resubmit _____ Copies
 Return _____ Copies
 Review and Comment



Infrastructure, environment, facilities

Mailing Method

- U.S. Postal Service 1st Class Courier/Hand Delivery FedEx Priority Overnight
 Certified/Registered Mail United Parcel Service (UPS) FedEx Standard Overnight
 Other:
-

Comments: This package completes the required submittals for 2006, with the following two exceptions:

- 1) Disposal tickets for the wood chips from Midwest Material Management LLC (MMM)
 - 2) Qualification information for the landfill/recyclers from Waste Management and MMM
-

Material Sources

Submittals section 2200.1.6.1

Vendor	Material	Location	Material Location	Phone
1 Earth Inc.	River Rock - 6"-8" cobbles	1100 N. Ellis Ave. Bensenville, IL 60106	Bartlett	630-860-7711
2 Vulcan Materials Company	CM-06 Stone	22700 W. 111th Street, Naperville, IL 60564	same	630-904-1110
3 Vulcan Materials Company	CA-7 bedding stone	same	same	same
4 Feltes Sand and Gravel	CA-6 crushed gravel	P.O. Box 370 Elburn, IL 60119	Elburn Plant	630-365-3600
5 Feltes Sand and Gravel	FA-2 Sand	same	same	same
6 Conco-Western Stone Company	CM-06 Stone	Route 25, North Aurora, IL 60542	same	630-892-1616
7 Conco-Western Stone Company	CM-01 Stone	same	same	same
8 Conco-Western Stone Company	RR-3 rip rap stone	same	same	same
9 Boughton Trucking and Material, Inc.	3/4" limestone, CA-11 stone	11746 S. Naperville - Plainfield Rd, Plainfield, IL 60544	same	815-436-4555
10 Carmeuse Lime	Steel Grade - Large Rescre	Buffington - Gary, Indiana	Buffington Plant	412-327-8850
11 Compost Supply, Inc.	Compost	21W180 Hill Ave.-1B, Glen Ellyn, IL 60137	same	630-858-8070
12 Arthur J. Lootens & Sons, Inc.	backfill	0 South 551 Joliet Road, West Chicago, IL 60185	same	630-231-1487
13 Arthur J. Lootens & Sons, Inc.	black dirt - topsoil	same	same	same
14 DuPage County Technology Park	black dirt - topsoil	Route 38, Geneva, IL 60134 (Kudrna & Assoc.)	n/a	630-929-3208

Material Quantities

River Rock - 2006

Date	Location/Purpose	Delivered By	Loads	Tons	Total Tons	CY	Total CY
5/25/2006	3A/Stockpile	Earth Inc.	14	299.42	299	200	200
5/30/2006	3A/Stockpile	Earth Inc.	8	170.85	470	114	314
6/2/2006	3A Restoration	Earth Inc.	13	267.13	737	179	493
6/6/2006	3A Restoration	Earth Inc.	6	127.77	865	86	578
6/7/2006	3A Restoration	Earth Inc.	4	85.61	951	57	635
6/8/2006	3A Restoration	Earth Inc.	4	87.13	1038	58	694
6/28/2006	3B Restoration	Earth Inc.	8	168.90	1207	113	807
6/29/2006	3B Restoration	Earth Inc.	9	191.52	1398	128	935
6/30/2006	3B Restoration	Earth Inc.	3	64.43	1463	43	979
7/1/2006	3B Restoration	Earth Inc.	5	103.80	1567	70	1048
7/5/2006	3B Restoration	Earth Inc.	6	126.60	1693	85	1133
7/7/2006	3B Restoration	Earth Inc.	12	246.90	1940	165	1298
7/13/2006	4	Earth Inc.	7	151.21	2091	101	1400
7/17/2006	4	Earth Inc.	4	79.70	2171	53	1453
7/17/2006	4	Earth Inc.	7	142.75	2314	96	1549
7/18/2006	4	Earth Inc.	7	142.75	2456	96	1644
REACH 5B							
8/31/2006	5B	Earth Inc.	14	291.57	292	195	1840
9/8/2006	5B	Earth Inc.	18	380.22	672	255	2094
9/8/2006	5B	Earth Inc.	5	98.60	770	66	2160
9/14/2006	5B	Earth Inc.	20	416.16	1187	279	2439
9/14/2006	5B	Earth Inc.	6	117.80	1304	79	2518
9/20/2006	5B	Earth Inc.	25	503.81	1808	338	2856
9/21/2006	5B	Earth Inc.	21	419.95	2228	281	3137
9/26/2006	5B	Earth Inc.	10	212.47	2441	142	3279
REACH 5C					2441		3279
10/19/2006	5C	Earth Inc.	4	80.29	2521	54	3333

River Rock - Reach 5A, 1, & 2 during 2005

Delivery Date	Location	Delivered By	Loads	Tons	Total Tons	CY	Total CY	Approved Backfill Sample Number
7/18/05	R5A	Earth Inc.	1	20	20	14	14	
7/22/05	R5A	Earth Inc.	1	20	40	13	27	
7/22/05	R5A	Earth Inc.	1	20	60	13	40	
7/29/05	R5A	Earth Inc.	5	105	166	71	111	
8/3/05	R5A	Earth Inc.	5	104	270	70	181	
9/23/05	R1/R2	Earth Inc.	1	20	290	13	194	
10/14/05	R1/R2	Earth Inc.	6	126	416	85	279	Samples from BBLES Transmittal KC068 correspond to 885 cy of river rock
10/13/05	R1/R2	Earth Inc.	2	41	457	28	306	
10/14/05	R1/R2	Earth Inc.	12	252	709	169	475	
10/20/05	R1/R2	Earth Inc.	9	176	885	118	593	
10/22/05	R1/R2	Earth Inc.	1	20	906	14	607	
10/22/05	R1/R2	Earth Inc.	3	62	968	42	649	
10/19/05	R1/R2	Earth Inc.	1	21	989	14	662	
10/20/05	R1/R2	Earth Inc.	8	164	1153	110	772	
10/21/05	R1/R2	Earth Inc.	1	20	1173	14	786	
10/22/05	R1/R2	Earth Inc.	7	148	1321	99	885	

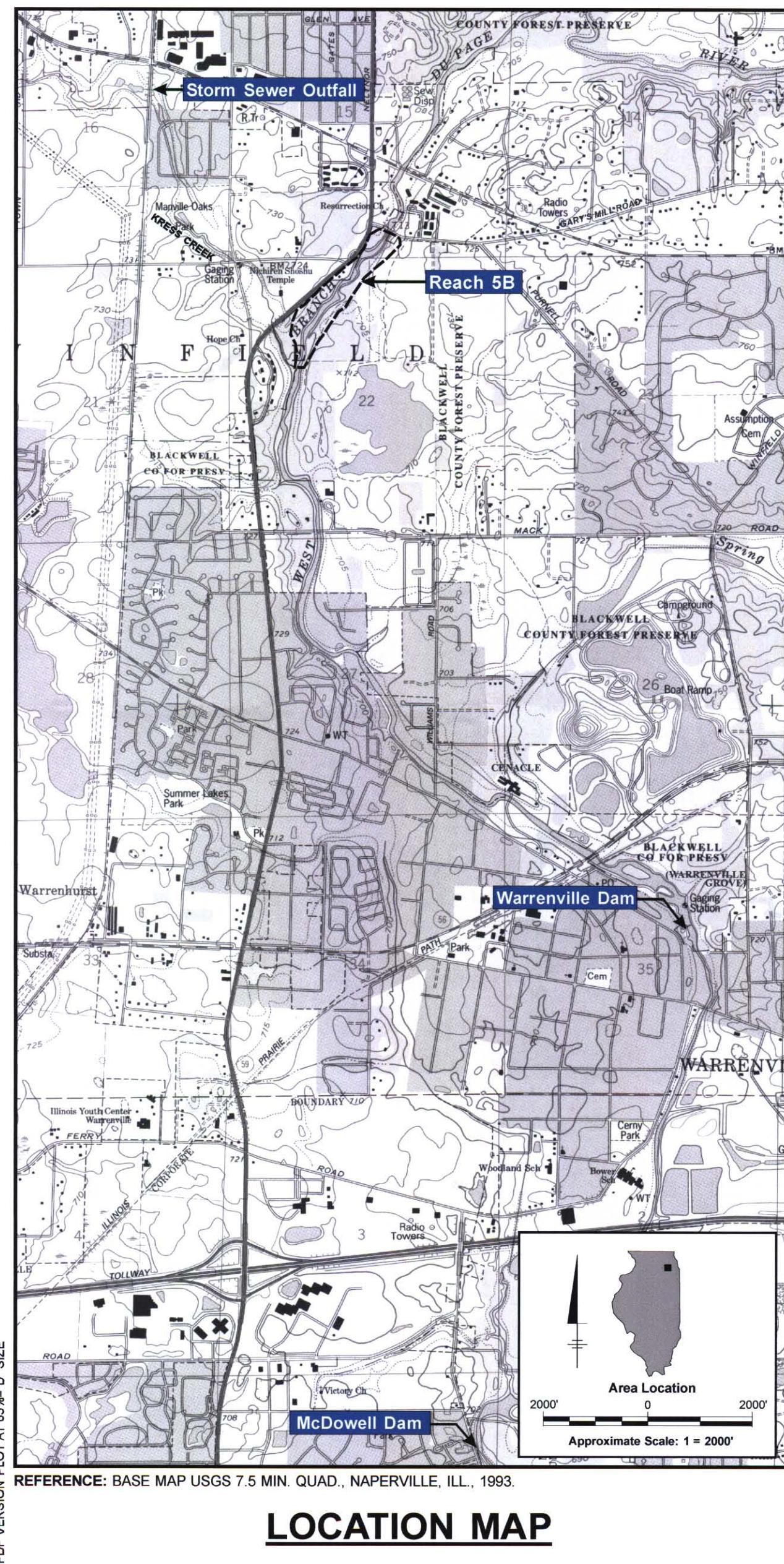
ARCADIS

Appendix H

Record Drawings

RECORD DRAWINGS

REMEDIAL ACTION FOR REACH 5B KRESS CREEK/WEST BRANCH DuPAGE RIVER SITE AND THE RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE



DuPAGE COUNTY, IL

RELEASED: JULY 2008
REVISED: NOVEMBER 2008

TRONOX LLC



ARCADIS

ARCADIS U.S., INC.

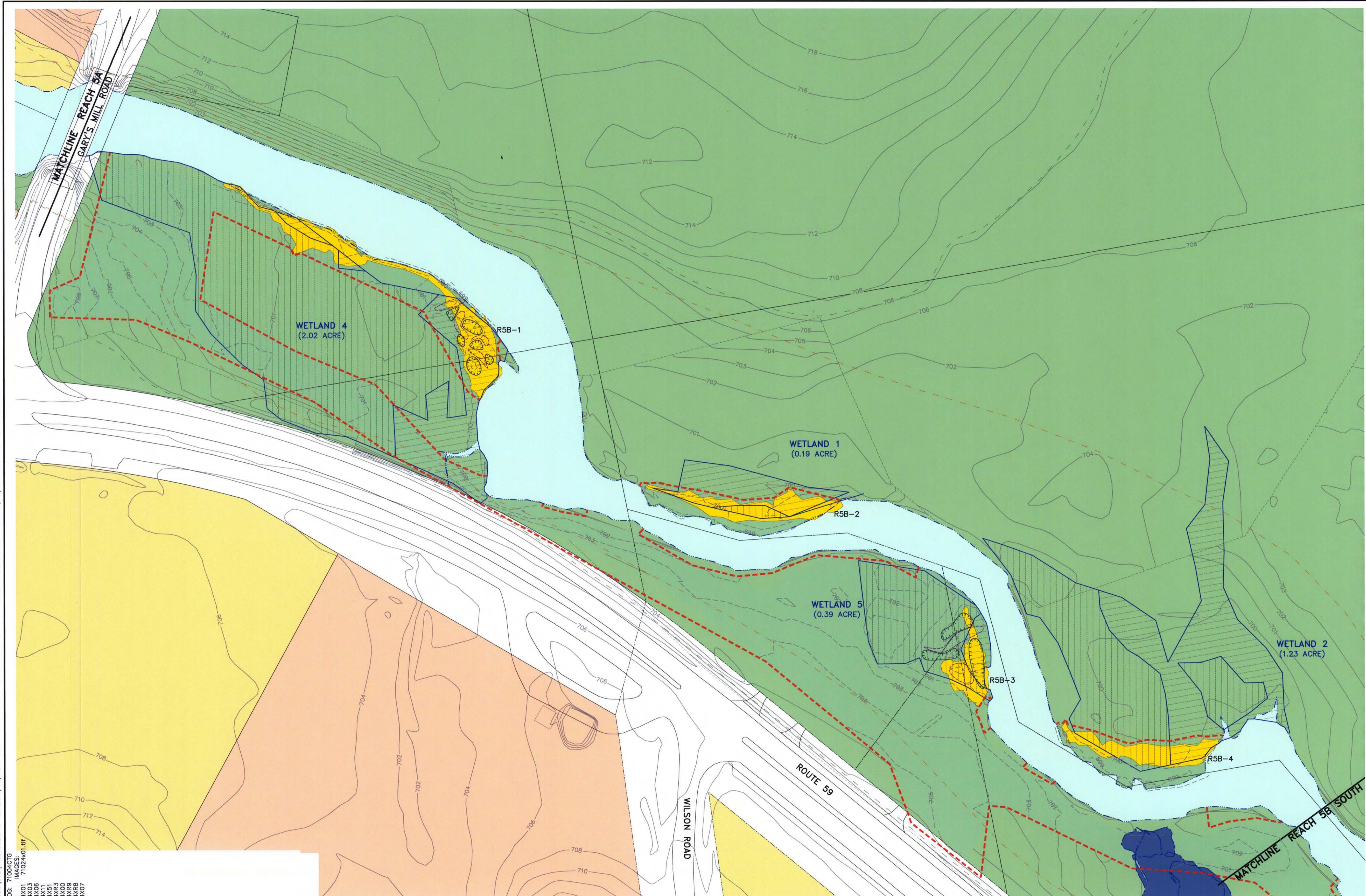
RECORD DRAWINGS
TO THE BEST OF OUR KNOWLEDGE,
INFORMATION AND BELIEF, THESE RECORD
DRAWINGS SUBSTANTIALLY REPRESENT
THE PROJECT AS CONSTRUCTED

DATE 11-12-08 BY NOG

INDEX OF DRAWINGS

- A-1 COVER SHEET
- B-1A SITE PLAN WITH WETLAND BOUNDARIES AND EXISTING TREES - REACH 5B NORTH
- B-1B SITE PLAN WITH WETLAND BOUNDARIES AND EXISTING TREES - REACH 5B SOUTH
- B-4 EXISTING CHANNEL PLAN AND PROFILE - REACH 5B
- B-7 TYPICAL BANK RESTORATION CROSS SECTIONS - REACH 5B
- B-8A TYPICAL WOODY STREAM ENHANCEMENT STRUCTURE DETAILS
- B-8B TYPICAL ROCK STREAM ENHANCEMENT STRUCTURE DETAILS
- B-9A RESTORATION APPLICATIONS - REACH 5B NORTH
- B-9B RESTORATION APPLICATIONS - REACH 5B SOUTH
- B-10A VEGETATION RESTORATION PLAN - REACH 5B NORTH
- B-10B VEGETATION RESTORATION PLAN - REACH 5B SOUTH
- B-11 VEGETATION SPECIFICATION SUMMARY TABLES
- B-12A POST CONSTRUCTION ELEVATIONS - REACH 5B NORTH
- B-12B POST CONSTRUCTION ELEVATIONS - REACH 5B SOUTH

A-1

**NOTES:**

- BASE MAP PROVIDED BY TRONOX LLC IN AN ARC VIEW PROJECT ENTITLED WEST CHICAGO KRESS CREEK. TOPOGRAPHIC LINES WITHIN THE LIMIT OF SURVEY LINE WERE DEVELOPED BY BLASLAND, BOUCK & LEE FROM SURVEY DATA PROVIDED BY PROSOURCE TECHNOLOGIES, INC., DUPAGE COUNTY, AND TRONOX.
- LOCATION OF FEN WETLANDS PROVIDED IN A SHAPE FILE BY CHRISTOPHER B. BURKE ENGINEERING WEST, LTD, DATED 2/24/06.

RECORD DRAWINGS
TO THE BEST OF OUR KNOWLEDGE,
INFORMATION AND BELIEF, THESE RECORD
DRAWINGS SUBSTANTIALLY REPRESENT THE
PROJECT AS CONSTRUCTED.

(RECORD DRAWING: MADE FROM DRAWING NO. B-1A, TRACER NO. 71004026/REACH5B/7104G02.DWG, DATED 8/07/06)

DATE 7/23/08 BY MOG

ORIGINAL SCALE APPLIES TO 22"X34" DRAWING
60' 0" 60' 120'

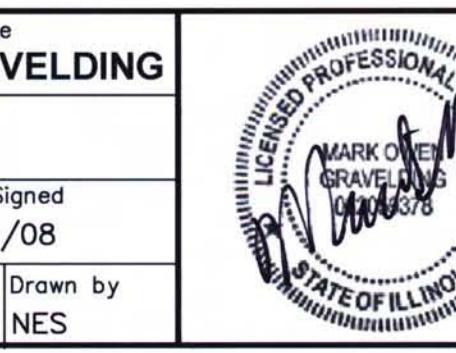
THIS DRAWING WAS PREPARED AT THE SCALE(S) INDICATED.
INACCURACIES IN THE STATED SCALE(S) MAY BE INTRODUCED.
WHEN DRAWINGS ARE REPRODUCED,
USE THE GRAPHIC SCALE BAR(S) TO DETERMINE THE
ACTUAL SCALE(S) OF THIS DRAWING.

7/23/08	RECORD DRAWING	MOG
No.	Date	Revisions

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name
MARK OWEN GRAVELDING
Professional Engineer's No.
062059378

State ILLINOIS	Date Signed 7/23/08
Init MOG	Project Mgr. MOG
Designed by ANE	Drawn by NES



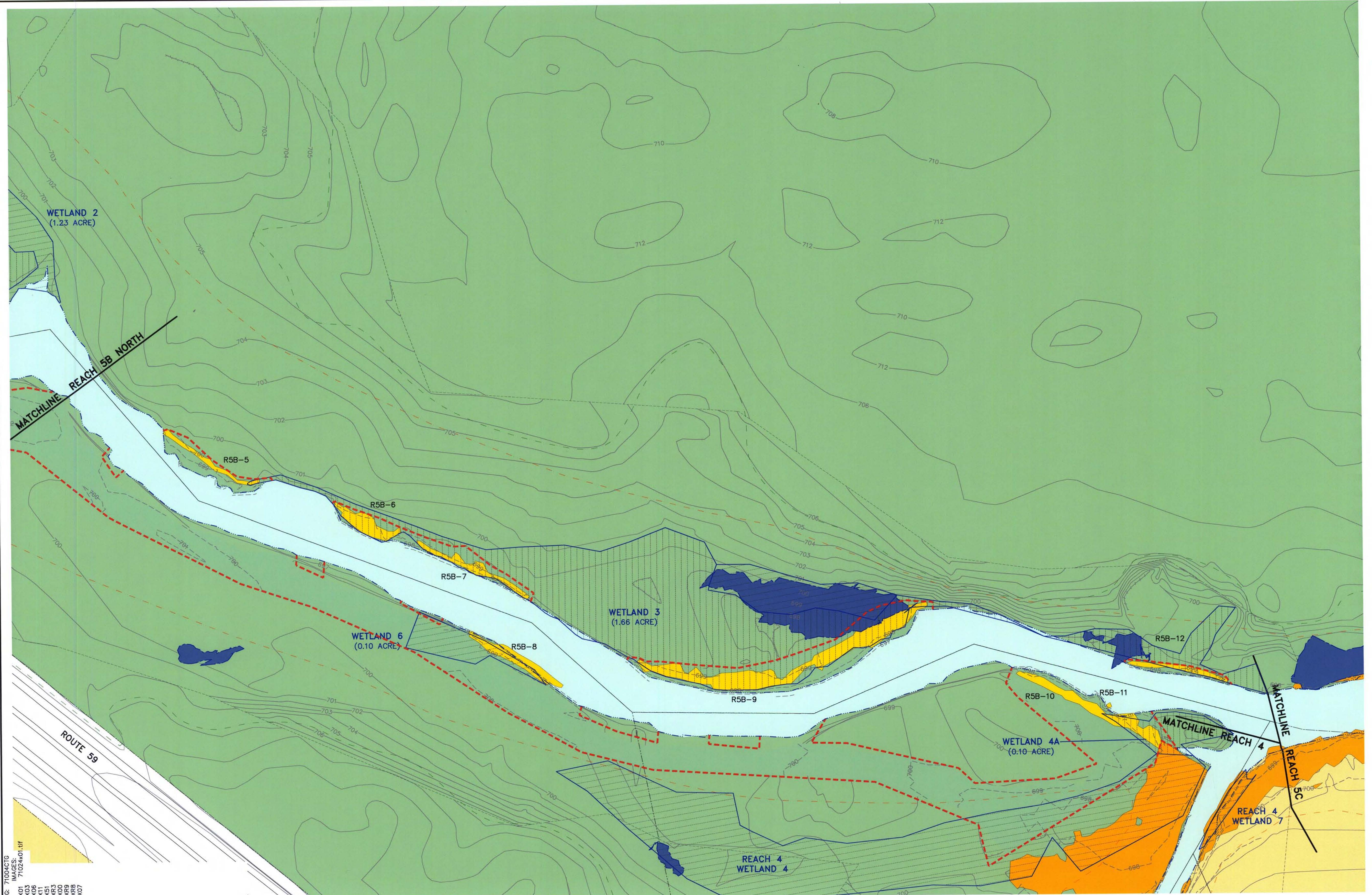
ARCADIS
ARCADIS U.S., INC.

TRONOX LLC • KRESS CREEK/WEST BRANCH DuPAGE RIVER SITE AND THE
RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

SITE PLAN WITH WETLAND BOUNDARIES - REACH 5B NORTH

B0071024034
Date JULY 2008
ARCADIS 6723 Toppath Road PO BOX 66 Syracuse, NY 13214-9154 315.446.9120

B-1A



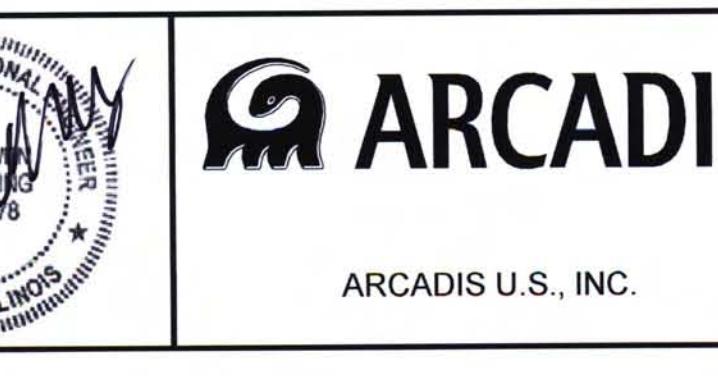
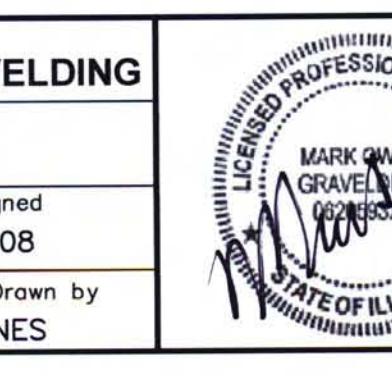
(RECORD DRAWING: MADE FROM DRAWING NO. B-1B, TRACER NO. 71004026/REACH5B/71004G02.DWG, DATED 8/07/06)

DATE 7/23/08 BY MOG

ORIGINAL SCALE APPLIES TO 22"X34" DRAWING	60'	0	60'	120'
<small>KREFS: 71004K01 71004K03 71004K05 71004K11 71024K01 71024K03 71024K05 71024K06 71024K07</small>				
<small>THIS DRAWING WAS PREPARED AT THE SCALE(S) INDICATED. INACCURACIES IN THE STATED SCALE(S) MAY BE INTRODUCED IN THE DRAWINGS AS A RESULT OF PROJECTION USE THE GRAPHIC SCALE BAR(S) TO DETERMINE THE ACTUAL SCALE(S) OF THIS DRAWING.</small>				

<small>▲ 7/23/08 RECORD DRAWING</small>	MOG
No. Date	Revisions
<small>THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.</small>	

Professional Engineer's Name MARK OWEN GRAVELDING		
Professional Engineer's No. 062059378		
State ILLINOIS	Date Signed 7/23/08	Init
Project Mgr. MOG	Designed by ANE	Drawn by NES

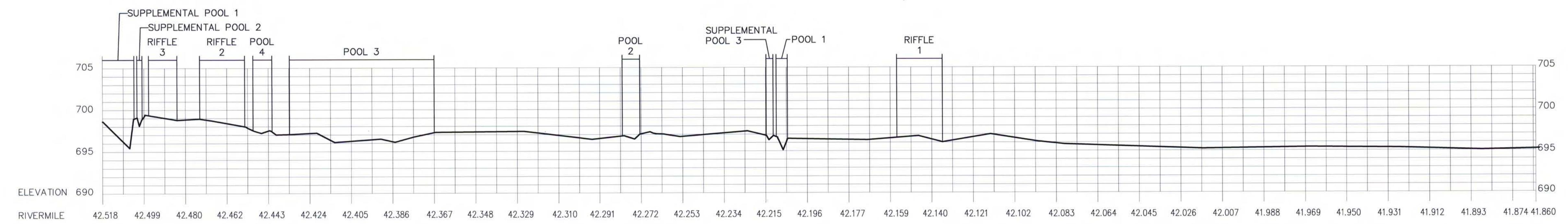
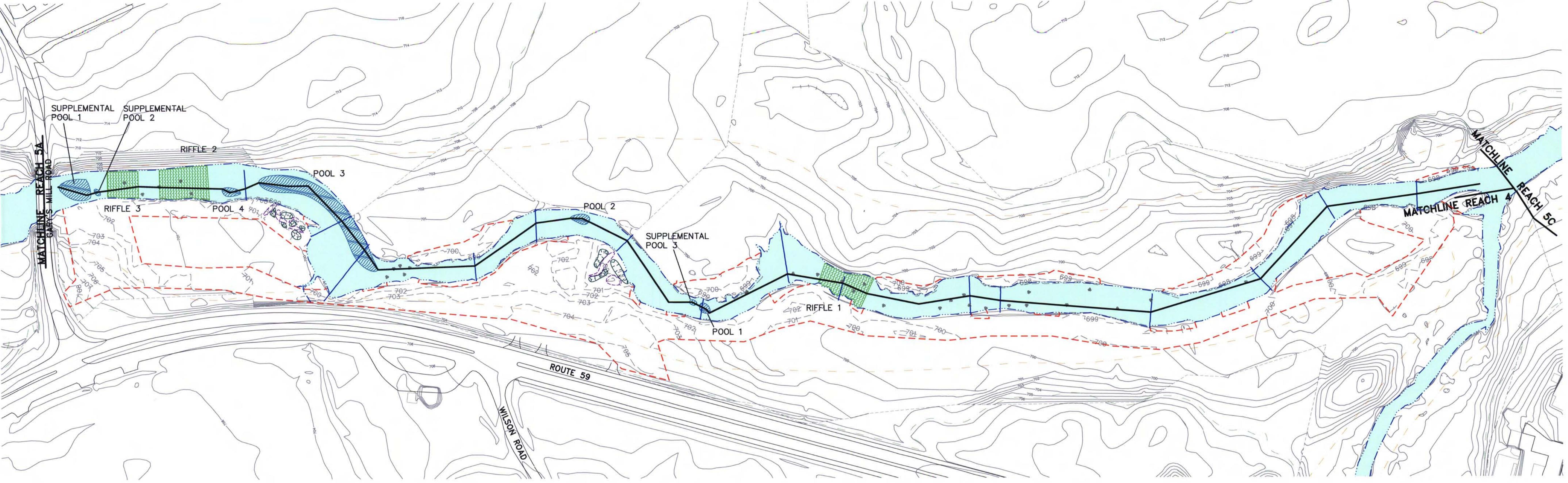


ARCADIS U.S., INC.

TRONOX LLC • KRESS CREEK/WEST BRANCH DUPAGE RIVER SITE AND THE
 RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

SITE PLAN WITH WETLAND BOUNDARIES - REACH 5B SOUTH

B0071024034
Date JULY 2008
ARCADIS 6723 Towpath Road PO BOX 66 Syracuse, NY 13214-9154 315.446.9120
B-1B



NOTES:

1. PROFILE GENERATED USING POST-CONSTRUCTION SURVEY DATA FROM POOLS, RIFFLES, AND TRANSECTS COLLECTED BY PROSOURCE TECHNOLOGIES, INC.
2. PROFILE ELEVATIONS GIVEN IN FEET ABOVE MEAN SEA LEVEL.

RECORD DRAWINGS
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INFORMATION AND BELIEF, THESE RECORD
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PROJECT AS CONSTRUCTED.

DATE 7/23/08 BY MOG

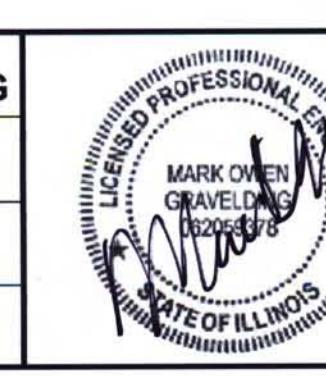
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71024XR5
71024XR6
71024XR8

ORIGINAL SCALE APPLIES TO 22"X34" DRAWING
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USE THE GRAPHIC SCALE BAR(S) TO DETERMINE THE
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7/23/08 RECORD DRAWING
No. Date Revisions
MOG Init
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PERMISSION OF SAME.

Professional Engineer's Name
MARK OWEN GRAVELDING
Professional Engineer's No.
062059378
State
ILLINOIS
Date Signed
7/23/08
LICENCED PROFESSIONAL ENGINEER
MARK OWEN GRAVELDING
062059378
STATE OF ILLINOIS
Project Mgr. Designed by Drawn by
MOG ANE NES



ARCADIS
ARCADIS U.S., INC.

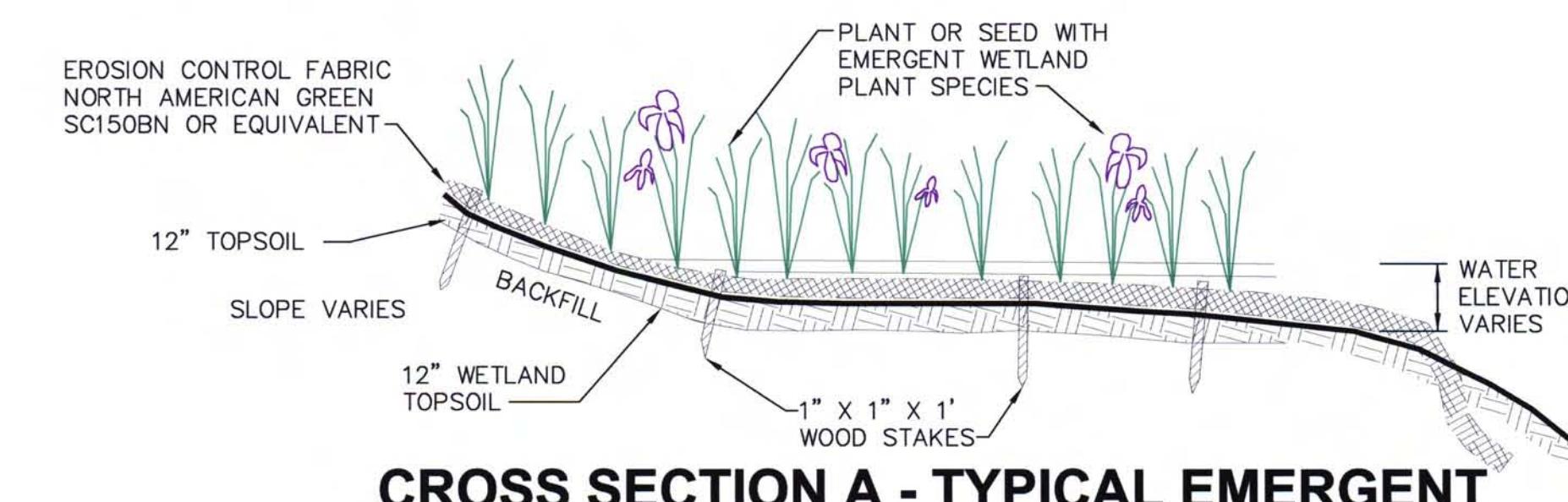
(RECORD DRAWING: MADE FROM DRAWING NO. B-4, TRACER NO. 71004026/REACH5B/71004G09.DWG, DATED 8/07/06)

TRONOX LLC • KRESS CREEK/WEST BRANCH DuPAGE RIVER SITE AND THE
RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

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Date JULY 2008	
ARCADIS	
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PO Box 66	
Greece, NY 13214.9154	
315.446.5120	

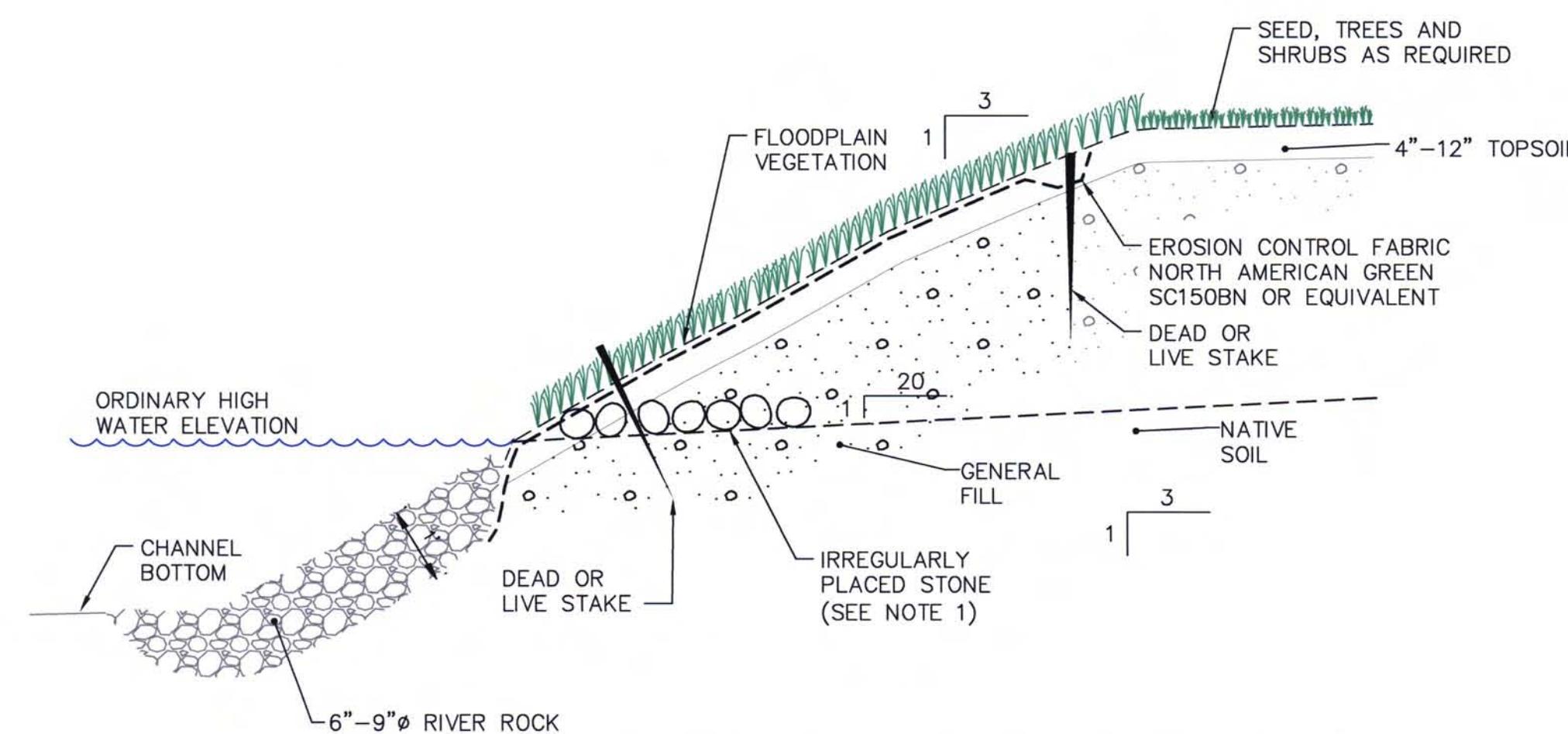
**EXISTING CHANNEL PLAN AND PROFILE -
REACH 5B**

B-4



**CROSS SECTION A - TYPICAL EMERGENT
WETLAND BANK RESTORATION DETAIL**

NOT TO SCALE



**CROSS SECTION B - TYPICAL
VEGETATED BANK RESTORATION DETAIL**

NOT TO SCALE

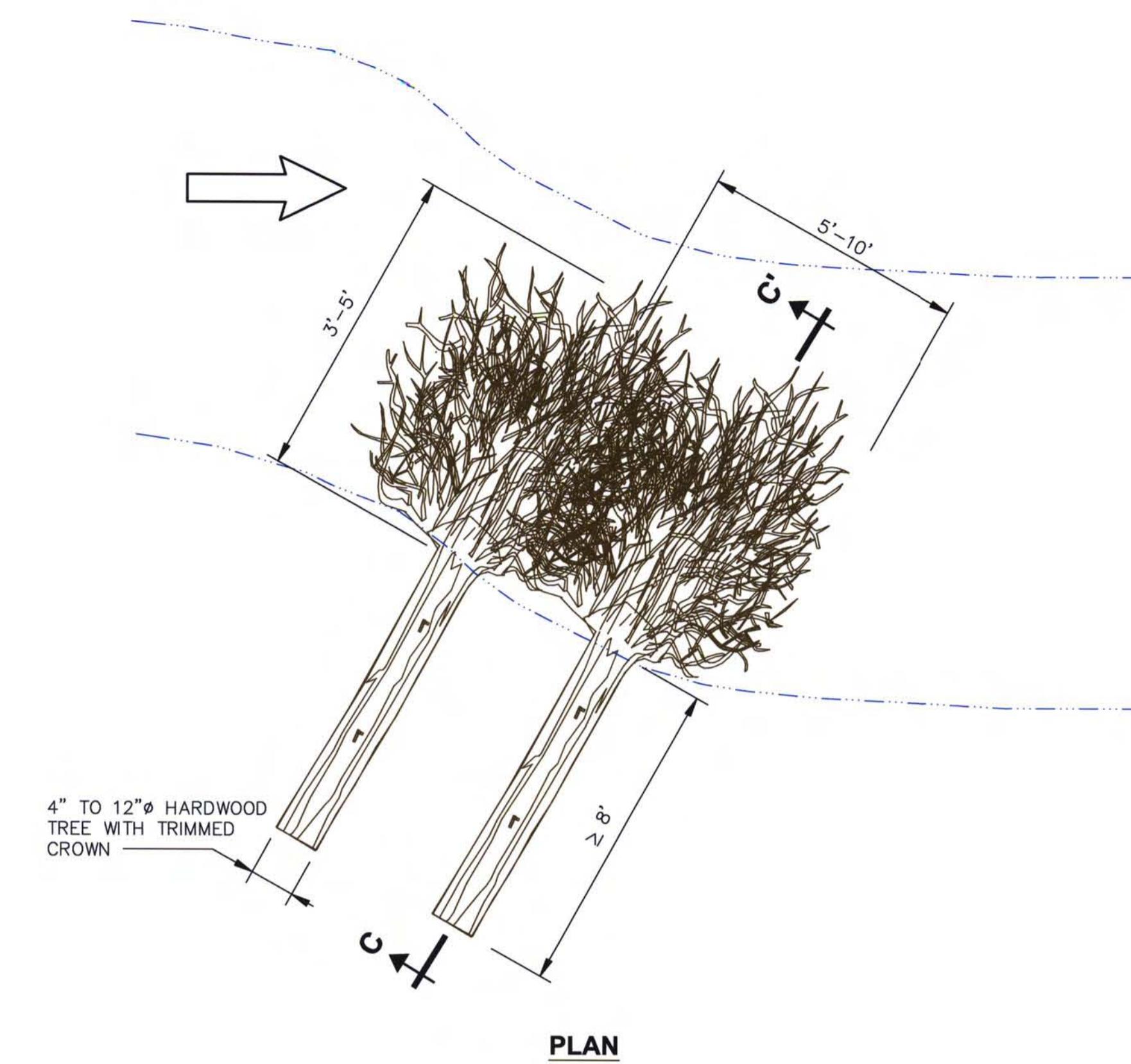
NOTE:

1. BANKS SHOWN AS RECEIVING BANK LOADING ON DRAWINGS B-9A AND B-9B RESTORED AT A 20:1 SLOPE WITH IRREGULARLY PLACED STONE.

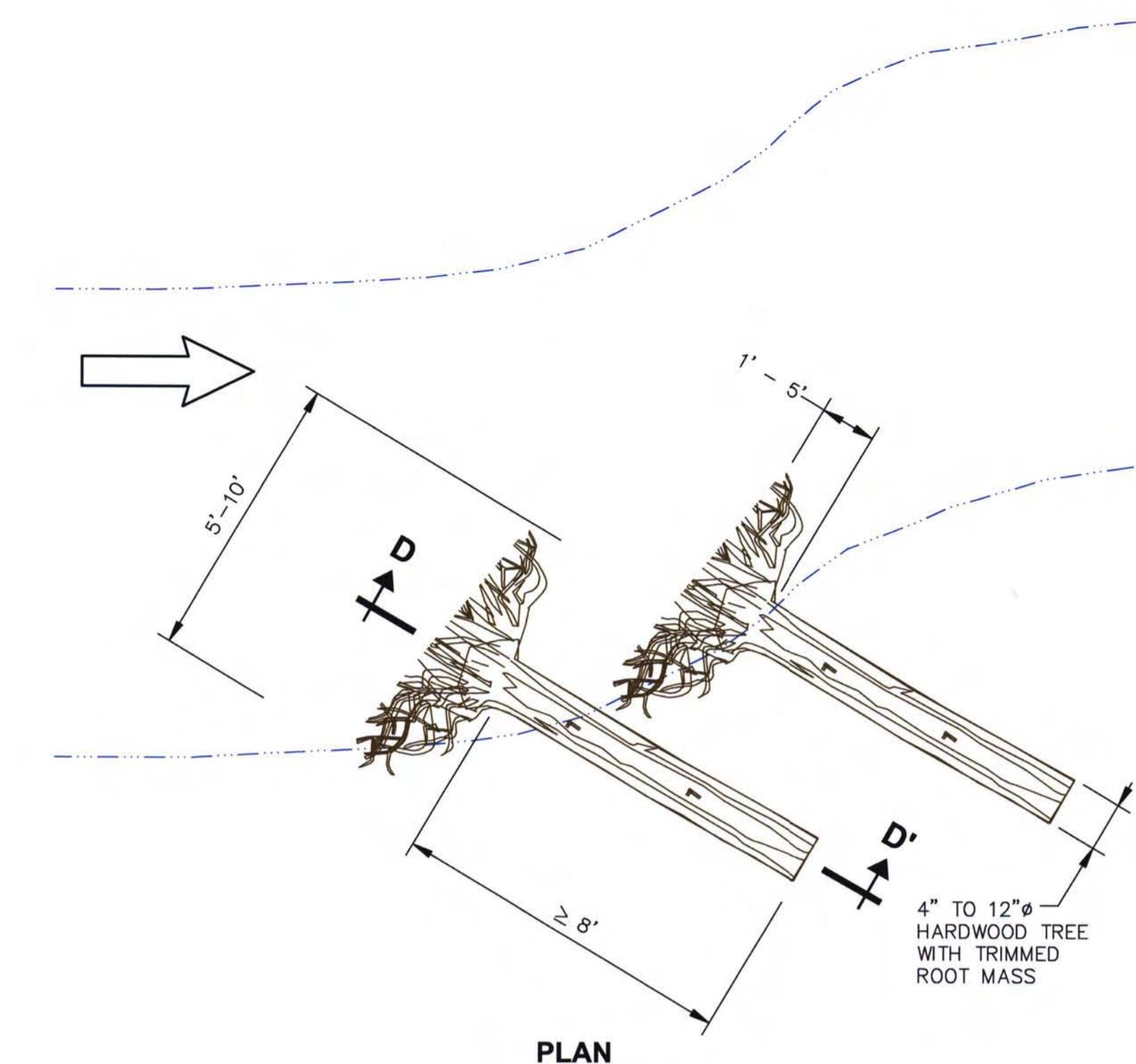
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(RECORD DRAWING: MADE FROM DRAWING NO. B-7, TRACER NO. 71004026/REACH5B/71004G08.DWG, DATED 8/07/06)

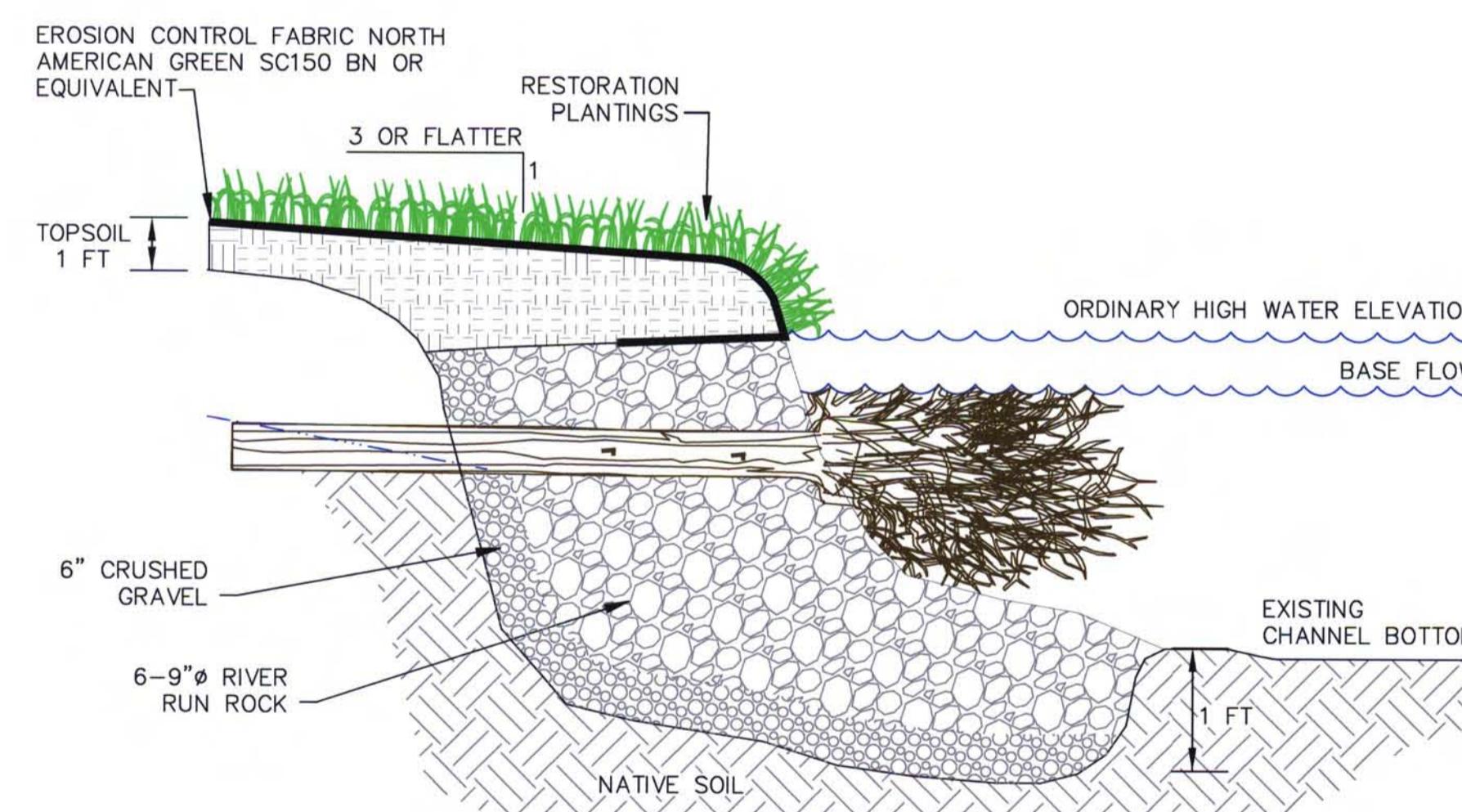
DATE 7/23/08 BY MOG



PLAN



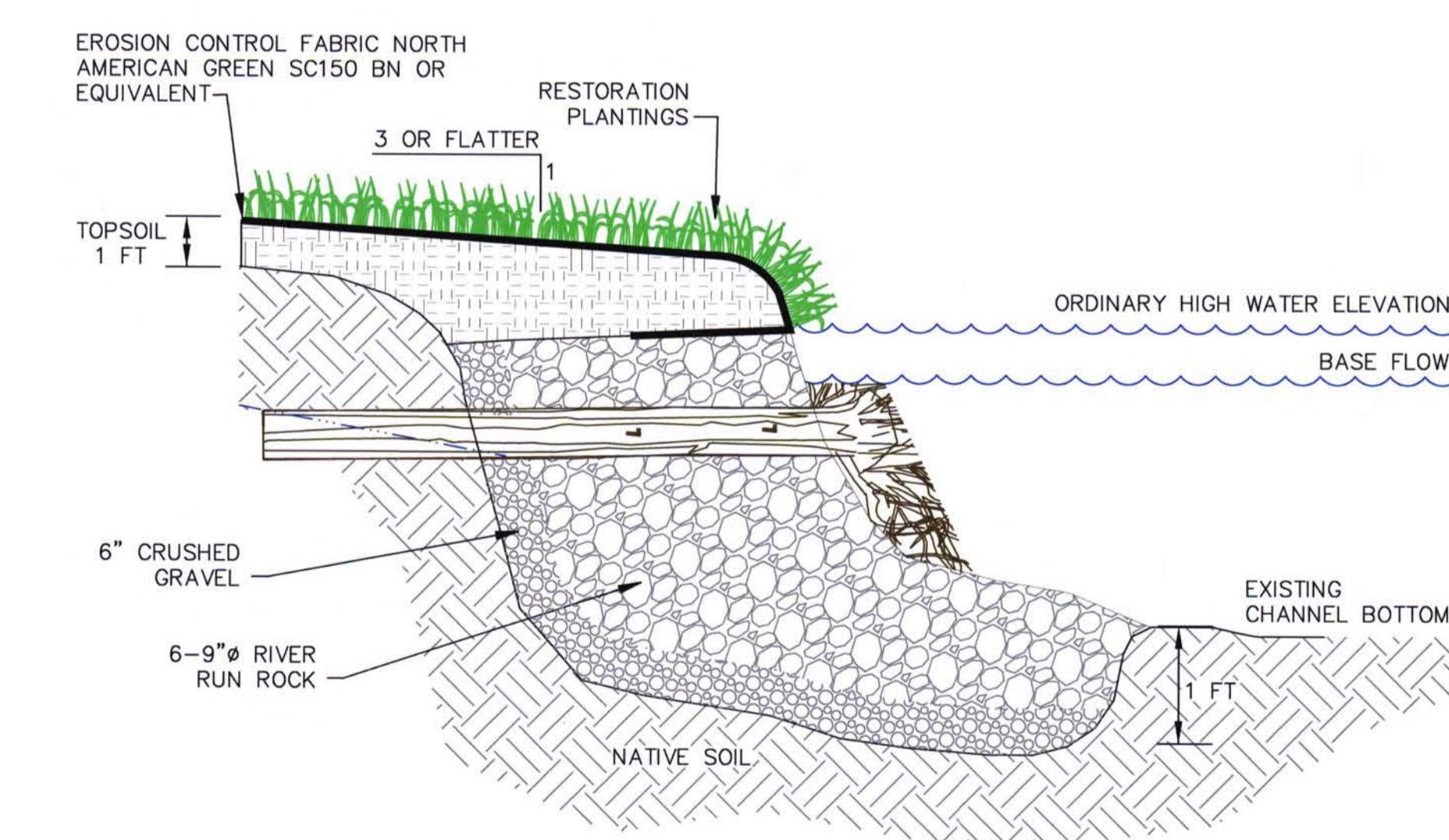
PLAN



CROSS SECTION

CROSS SECTION C - TYPICAL TREE CROWN HABITAT ENHANCEMENT

NOT TO SCALE



CROSS SECTION

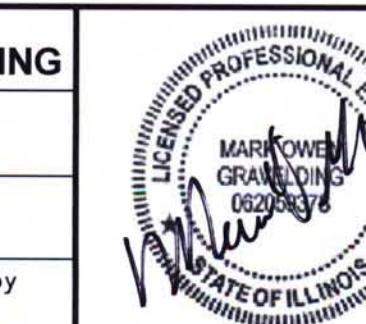
CROSS SECTION D - TYPICAL ROOT WAD HABITAT ENHANCEMENT

NOT TO SCALE

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Professional Engineer's Name
MARK OWEN GRAVELDING
 Professional Engineer's No.
 062059378
 Date 7/23/08
 State ILLINOIS
 Date Signed 7/23/08
 Init MOG
 Revisions
 No. Date
 □ 7/23/08 RECORD DRAWING
 Project Mgr. Drawn by
 MOG ANE NES
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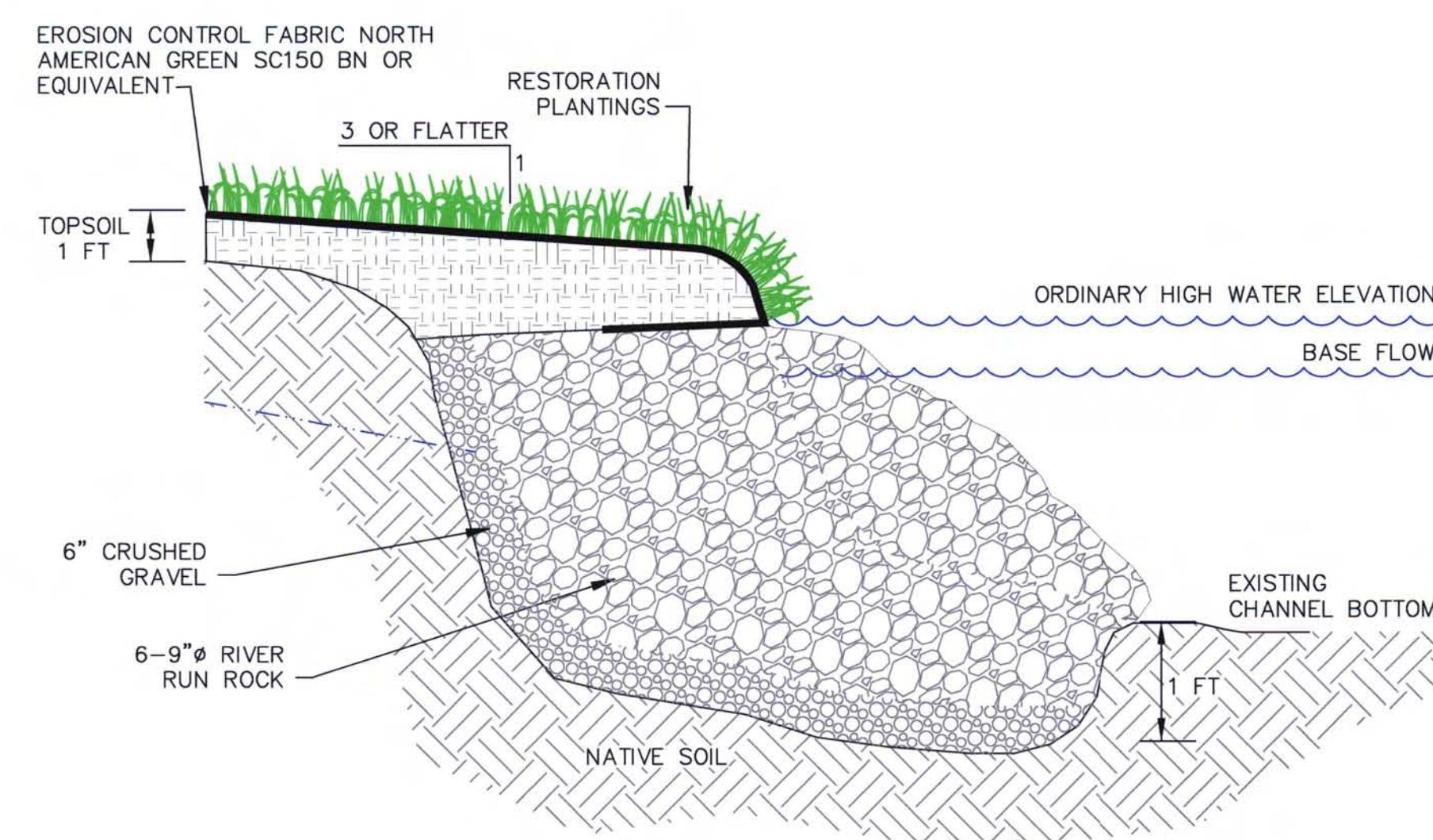
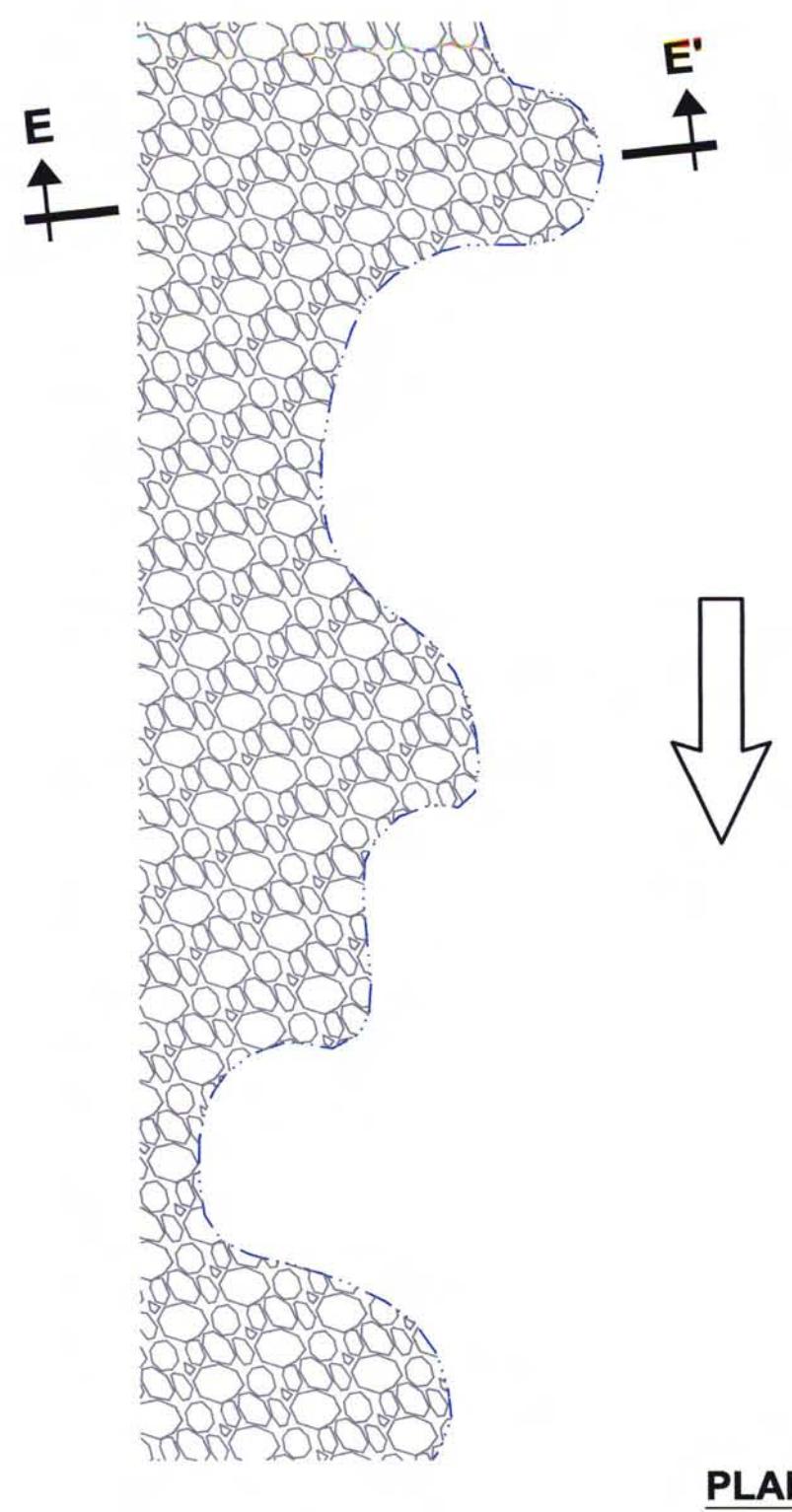
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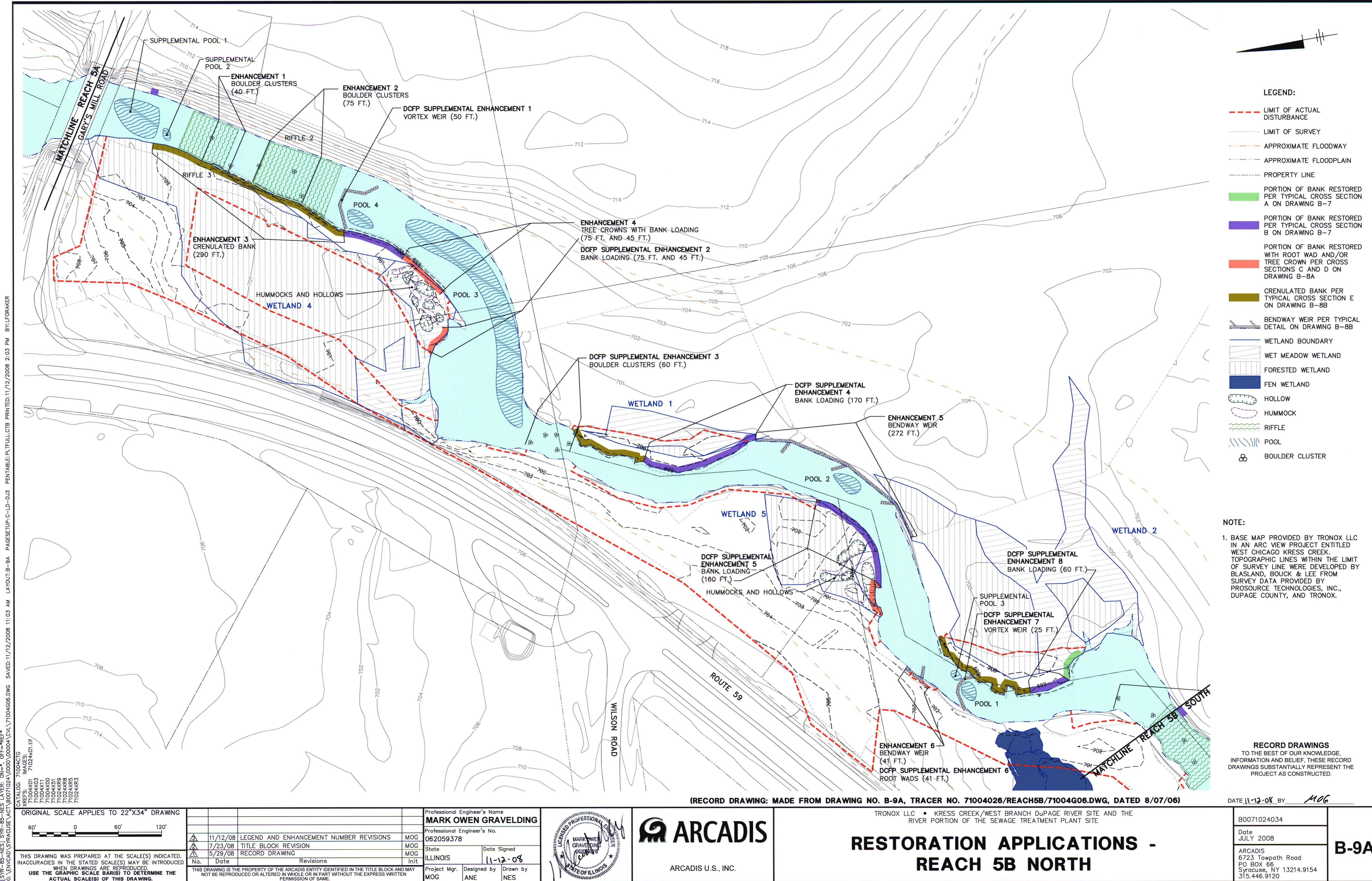
TRONOX LLC • KRESS CREEK/WEST BRANCH DUPAGE RIVER SITE AND THE
 RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

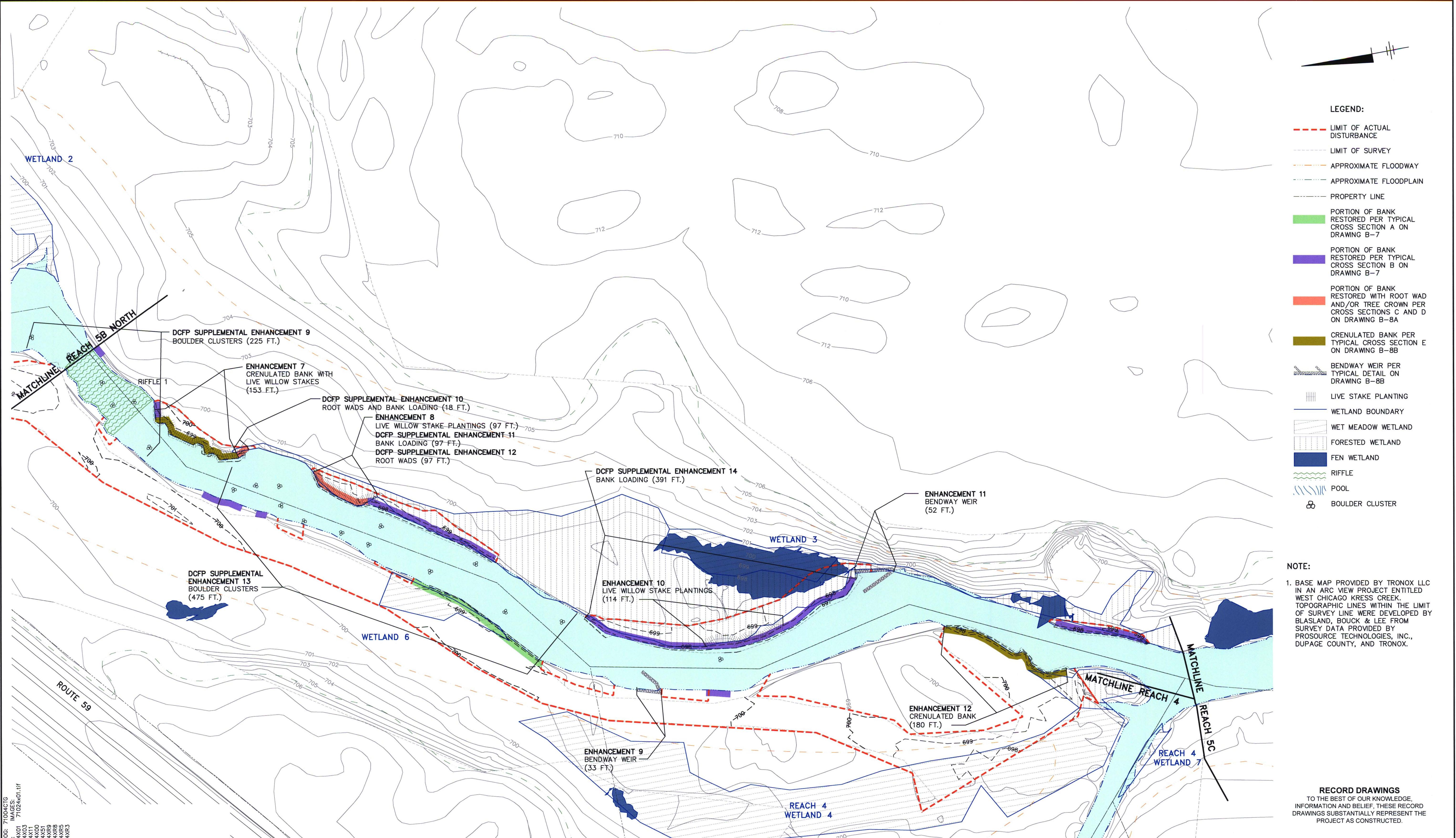
DATE 7/23/08 BY MOG
 B0071024034
 Date JULY 2008
 ARCADIS
 6723 Towpath Road
 P.O. Box 66
 Syracuse, NY 13214-9154
 315.446.9120

**TYPICAL WOODY STREAM
 ENHANCEMENT STRUCTURE DETAILS**

B-8A







(RECORD DRAWING: MADE FROM DRAWING NO. B-9B, TRACER NO. 71004026/REACH5B/71004G06.DWG, DATED 8/07/06)

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DATE 11-12-06 BY MCG

B-9B



The logo consists of a stylized, blocky profile of an elephant's head facing left, followed by the word "ARCADIS" in a large, bold, sans-serif font.

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RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

RESTORATION APPLICATIONS - REACH 5B SOUTH

ORIGINAL SCALE APPLIES TO 22"X34" DRAWING															
60'	0	60'	120'												
															
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 3	11/12/08	LEGEND REVISIONS													
 2	7/23/08	TITLE BLOCK REVISION													
 1	5/29/08	RECORD DRAWING													
No.	Date	Revisions													

		Professional Engineer's Name MARK OWEN GRAVEL
		Professional Engineer's No. 062059378
MOG	State ILLINOIS	Date Signed 11-12-0
MOG		
MOG		
Init		
BLOCK AND MAY SS WRITTEN	Project Mgr. MOG	Designed by ANE
		Draw NES

A circular, dotted seal with the words "LICENSED PROFESSIONAL" and "MARKER GRAVURE" around the top edge and "STATE OF" at the bottom. A signature is in the center.

The seal of the state of Illinois, featuring a central shield with a plow, a sheaf of wheat, and a star, surrounded by a circular border with the words "THE STATE OF ILLINOIS".

ARCADIS U.S., INC.

B0071024034
Date JULY 2008
ARCADIS 6723 Towpath Road PO BOX 66 Syracuse, NY 13214.9154 315.446.9120

11

LEGEND:

	LIMIT OF ACTUAL DISTURBANCE
	LIMIT OF SURVEY
	PROPERTY LINE
	WETLAND BOUNDARY
	WET MEADOW WETLAND
	FORESTED WETLAND
	FEN WETLAND
	HOLLOW
	HUMMOCK
	AREA SEDED AS REQUIRED WITH BANK SEED MIX PER TABLE 4 ON DRAWING B-11
	AREA SEDED AS REQUIRED WITH BANK SEED MIX PER TABLE 4 AND WETLAND SEED MIX PER TABLE 5 ON DRAWING B-11
	AREA SEDED WITH WETLAND SEED MIX PER TABLE 5 ON DRAWING B-11
	AREA SEDED AS REQUIRED WITH SHADY FLOODPLAIN SEED MIX PER TABLE 2 ON DRAWING B-11
	AREA SEDED WITH FEN SEED MIX PER TABLE 3 ON DRAWING B-11
	AREA SEDED WITH UPLAND SAVANNA SEED MIX PER TABLE 7 ON DRAWING B-11
	PIPE CORRIDOR SEDED WITH ANNUAL RYE AND SEED OATS AT 32 LBS. PER ACRE
	REPLACEMENT 1 1/2" DIAMETER TREE
	REPLACEMENT 1 TO 5-GALLON TREE/SHRUB

Sym.	Species	Quantity Planted
1.5 Inch		
CCO	Carya cordiformis	10
COV	Carya ovata	12
CO	Celtis occidentalis	40
JN	Juglans nigra	19
MI	Malus ioensis	3
OV	Ostrya virginiana	11
QB	Quercus bicolor	70
QI	Quercus imbricaria	5
QM	Quercus macrocarpa	87
QMB	Quercus muehlenbergii	4
QV	Quercus velutina	2
SN	Salix nigra (See Note 4)	0
Total 1.5 inch		263
1 to 5 Gal.		
CA	Corylus americana	10
CCA	Crataeus calpodendron	5
CCC	Crataegus coccinea	5
CCG	Crataegus crus-galli	12
CES	Celastrus scandens	8
CO	Celtis occidentalis	19
COB	Cornus obliqua	25
CS	Cornus stolonifera	33
JN	Juglans nigra	8
LP	Lonicera perfoliata	8
MI	Malus ioensis	8
PA	Prunus americana	8
PT	Ptelea trifoliata	8
PV	Prunus virginiana	7
QB	Quercus bicolor	48
QM	Quercus macrocarpa	42
RA	Ribes americanum	19
RM	Ribes missouriense	2
SC	Sambucus canadensis	23
SN	Salix nigra (See Note 4)	74
VL	Viburnum lentago	27
VP	Viburnum prunifolium	8
XA	Xanthoxylum americanum	9
Total 1 to 5 Gal.		416
Total Trees and Shrubs		679

NOTES:

1. INCLUDES SPECIES PLANTED IN REACH 5B NORTH AND SOUTH.
2. MI, RA, AND RM TREE AND SHRUB NUMBERS PRESENTED IN THE TABLE ARE BASED ON 2008 MONITORING OBSERVATIONS. LOCATIONS ON THE DRAWINGS WILL BE UPDATED FOLLOWING 2009 MONITORING ACTIVITIES.

NOTES:

1. BASE MAP PROVIDED BY TRONOX LLC IN AN ARC VIEW PROJECT ENTITLED WEST CHICAGO KRESS CREEK. TOPOGRAPHIC LINES WITHIN THE LIMIT OF SURVEY LINE WERE DEVELOPED BY BLASLAND, BOUCK & LEE FROM SURVEY DATA PROVIDED BY PROSOURCE TECHNOLOGIES, INC., DUPAGE COUNTY, AND TRONOX.
2. ALL SHRUBS 1 TO 5-GALLON CONTAINER STOCK.
3. REPLACEMENT TREES 1.5" CALIPER ROOT-BAGGED STOCK.
4. DUE TO AVAILABILITY 54 SALIX NIGRA (SN) TREES WERE REPLACED WITH SALIX NIGRA SHRUB STOCK WITH THE APPROVAL OF THE LOCAL COMMUNITIES.

RECORD DRAWINGS

TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, THESE RECORD DRAWINGS SUBSTANTIALLY REPRESENT THE PROJECT AS CONSTRUCTED.

DATE 11-12-08 BY 106

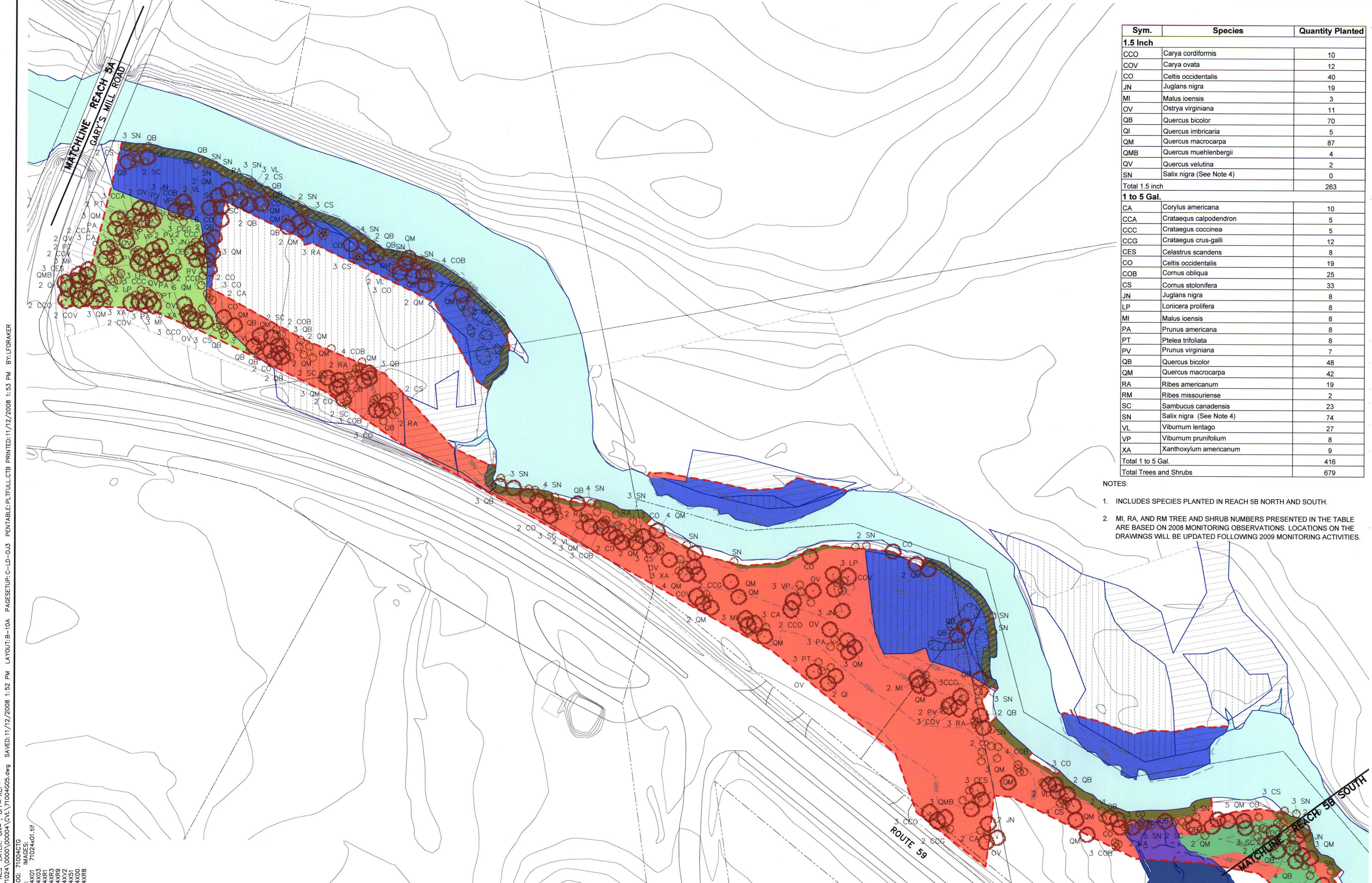
B0071024034	B-10A
Date JULY 2008	
ARCADIS 6723 Towpath Road PO BOX 66 Syracuse, NY 13214-9154 315.446.9120	

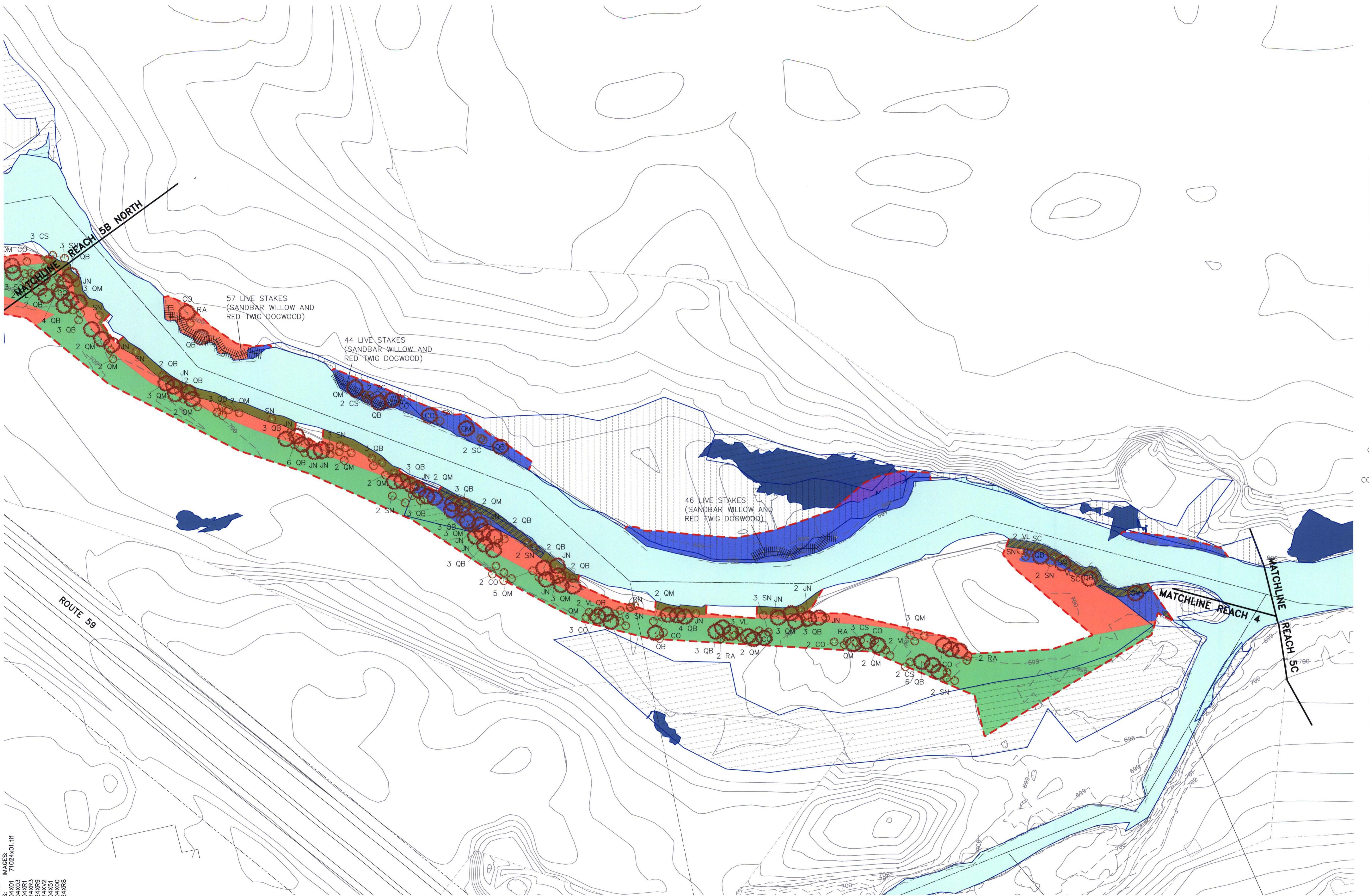
(RECORD DRAWING: MADE FROM DRAWING NO. B-10A, TRACER NO. 71004026/REACH5B/71004G05.DWG, DATED 8/07/06)



TRONOX LLC • KRESS CREEK/WEST BRANCH DUPAGE RIVER SITE AND THE RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

VEGETATION RESTORATION PLAN - REACH 5B NORTH





NOTES:

1. BASE MAP PROVIDED BY TRONOX LLC IN AN ARC VIEW PROJECT ENTITLED WEST CHICAGO KRESS CREEK. TOPOGRAPHIC LINES WITHIN THE LIMIT OF SURVEY LINE WERE DEVELOPED BY BLASLAND, BOUCK & LEE FROM SURVEY DATA PROVIDED BY PROSOURCE TECHNOLOGIES, INC., DUPAGE COUNTY, AND TRONOX.
2. ALL SHRUBS 1 TO 5-GALLON CONTAINER STOCK.
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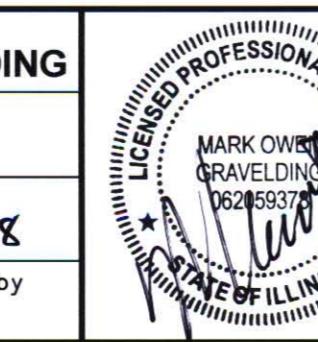
RECORD DRAWINGS
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DATE 11-12-08 BY MOG

(RECORD DRAWING: MADE FROM DRAWING NO. B-10B, TRACER NO. 71004026/REACH5B/71004G05.DWG, DATED 8/07/06)

ORIGINAL SCALE APPLIES TO 22"X34" DRAWING	
60'	0
60'	120'
11/12/08	LEGEND AND TREE REVISIONS BASED ON 2008 RESTORATION MONITORING
7/23/08	ADDED TREES AND SHRUBS IDENTIFIED AS MISSING DURING WALK THROUGH
5/29/08	RECORD DRAWING
THIS DRAWING WAS PREPARED AT THE SCALE(S) INDICATED. INACCURACIES IN THE STATED SCALE(S) MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED. USE THE GRAPHIC SCALE BAR(S) TO DETERMINE THE ACTUAL SCALE(S) OF THIS DRAWING.	
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△ 11/12/08	LEGEND AND TREE REVISIONS BASED ON 2008 RESTORATION MONITORING	MOG
△ 7/23/08	ADDED TREES AND SHRUBS IDENTIFIED AS MISSING DURING WALK THROUGH	MOG
△ 5/29/08	RECORD DRAWING	MOG



ARCADIS U.S., INC.

TRONOX LLC • KRESS CREEK/WEST BRANCH DuPAGE RIVER SITE AND THE
RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE

VEGETATION RESTORATION PLAN -
REACH 5B SOUTH

B0071024034
Date JULY 2008
ARCADIS 6723 Towpath Road PO Box 66 Syracuse, NY 13214-9154 315.446.9120

B-10B

TABLE 1

Sym.	Species	WI	Common Name
Trees			
QB	<i>Quercus bicolor</i> (FACW+)		Swamp White Oak
QM	<i>Quercus macrocarpa</i> (FAC)		Bur Oak
CO	<i>Celtis occidentalis</i> (FAC-)		Hackberry
CCG	<i>Crataegus crus-galli</i> (FAC)		Cockspur Hawthorn
Shrubs			
COB	<i>Cornus obliqua</i> (FACW+)		Silky Dogwood
CS	<i>Cornus stolonifera</i> (FACW)		Red Osier Dogwood
RA	<i>Ribes americanum</i> (FACW)		Wild Black Currant
SC	<i>Sambucus canadensis</i> (FACW-)		Common Elderberry
SN	<i>Salix nigra</i> (OBL)		Black Willow

NOTE:

- Values in parenthesis are wetland indicator status.

TABLE 5

Lbs./Acre	Species	Common Name
0.063	<i>Actinomeris (Verbina) alternifolia</i>	Wingstem
0.375	<i>Alisma subcordatum</i>	Common Water Plantain
0.063	<i>Alisma triviale</i>	Northern Water Plantain
0.031	<i>Anemone canadensis</i>	Meadow Anemone
0.25	<i>Asclepias incarnata</i>	Swamp Milkweed
0.375	<i>Aster nova-angliae</i>	New England Aster
0.031	<i>Aster simplex (lanceolatus)</i>	Panicled Aster
0.75	<i>Bidens cernua</i>	Nodding Bur Marigold
0.063	<i>Boehmeria cylindrica</i>	False Nettle
0.5	<i>Calamagrostis canadensis</i>	Blue Joint Grass
0.188	<i>Carex cristatella</i>	Crested Sedge
0.063	<i>Carex pellita (C. lanuginosa)</i>	Broad Leaved Wooly Sedge
0.25	<i>Carex scoparia</i>	Pointed Broom Sedge
0.5	<i>Carex stipata</i>	Awl-fruited Sedge
0.063	<i>Carex stricta</i>	Strict Sedge
0.25	<i>Carex tribuloides</i>	Awl-fruited Sedge
1	<i>Carex vulpinoidea</i>	Fox Sedge
1	<i>Cyperus esculentus</i>	Field Nut Sedge
1	<i>Echinocloa crusgalli</i>	Barnyard Grass
0.063	<i>Eleocharis erythropoda</i>	Red-rooted Spike Rush
0.015	<i>Erigeron philadelphicus</i>	Marsh Fleabane
0.125	<i>Eupatorium maculatum</i>	Spotted Joe Pye Weed
0.125	<i>Eupatorium perfoliatum</i>	Thoroughwort
0.188	<i>Gentiana andrewsii</i>	Butter Gentian
0.125	<i>Glyceria striata</i>	Fowl Manna Grass
0.125	<i>Helenium autumnale</i>	Sneezeweed
0.188	<i>Iris virginica shrevel</i>	Blue Flag
0.25	<i>Juncus torreyi</i>	Torrey's Rush
0.5	<i>Leersia oryzoides</i>	Rice Cut Grass
0.031	<i>Lobelia siphilitica</i>	Blue Lobelia
0.188	<i>Lycopus americanus</i>	Common Water Horehound
0.015	<i>Lythrum alatum</i>	Winged Loosestrife
0.015	<i>Mimulus ringens</i>	Monkey Flower
0.015	<i>Oenothera pilosella</i>	Prairie Sundrops
0.063	<i>Penthorum sedoides</i>	Ditch Stonecrop
0.094	<i>Physostegia virginiana speciosa</i>	Showy Dragonhead
0.125	<i>Pycnanthemum virginianum</i>	Common Mt. Mint
0.015	<i>Rudbeckia laciniata</i>	Coneflower from Hell
0.25	<i>Sagittaria latifolia</i>	Duck Potato
0.25	<i>Scirpus acutus (Schoenoplectus a.)</i>	Hard Stem Bulrush
1	<i>Scirpus atrovirens</i>	Dark Green Rush
0.25	<i>Scirpus validus (Schoenoplectus tabernaemontani)</i>	Great Bulrush
0.015	<i>Scutellaria lateriflora</i>	Mad Dog Skunkcap
0.063	<i>Solidago gigantea</i>	Late Goldenrod
0.063	<i>Teucrium canadense</i>	Germander
1	<i>Verbena hastata</i>	Blue Vervain
0.188	<i>Vernonia fasciculata</i>	Common Ironweed
Cover crop: <i>Avena sativa</i> (Seed Oats) @ 32 lbs. per acre		

NOTE:

- Seed applied at rate of 12.159 lbs. per acre plus cover crop.

TABLE 2

Lbs./Acre	Species	Common Name
0.62	<i>Actinomeris alternifolia</i>	Wingstem
0.62	<i>Aquilegia canadensis</i>	Wild Columbine
0.62	<i>Aster lateriflorus</i>	Calico Aster
0.15	<i>Aster shortii</i>	Short's Aster
0.125	<i>Boehmeria cylindrica</i>	False Nettle
0.25	<i>Bromus latiglumis (altissimus)</i>	Ear-Leaved Brome
0.06	<i>Campanula americana</i>	Tall Bellflower
0.062	<i>Carex blanda</i>	Creek Sedge
0.5	<i>Cinna arundinacea</i>	Stout Woodreed
0.031	<i>Diarrhena americana</i>	Diarrhena
1.0	<i>Elymus riparius</i>	River Bank Wild Rye
0.768	<i>Elymus villosus</i>	Slender Wild Rye
2.0	<i>Elymus virginicus</i>	Virginia Wild Rye
0.15	<i>Eupatorium rugosum</i>	White Snakeroot
0.15	<i>Festuca obtusa</i>	Fescue
0.5	<i>Glyceria striata</i>	Fowl Manna Grass
0.25	<i>Impatiens capensis</i>	Spotted Jewel-Weed
0.25	<i>Leersia oryzoides</i>	Rice Cutgrass
0.15	<i>Penstemon digitalis</i>	Foxglove Beard Tongue
0.15	<i>Phlox divaricata</i>	Wood Phlox
0.15	<i>Polygonatum canaliculatum</i>	Solomon's Seal
0.15	<i>Pycnanthemum virginianum</i>	Mountain Mint
0.44	<i>Rudbeckia laciniata</i>	Tall Coneflower
0.031	<i>Solidago flexiculis</i>	Broadleaf Goldenrod
0.031	<i>Solidago gigantea</i>	Late Goldenrod
0.125	<i>Solidago ulmifolia</i>	Elm-leaved Goldenrod
0.31	<i>Veronicastrum virginicum</i>	Culver's Root
0.062	<i>Zizia aurea</i>	Golden Alexanders

Cover Crop: Italian Rye @ 6 lbs. per acre

NOTE:

- Seed applied at rate of 10 lbs. per acre plus cover crop.

TABLE 3

Lbs./Acre	Species	Common Name
0.25	<i>Acoris calamus</i>	Sweet Flag
0.70	<i>Angelica atropurpurea</i>	Angelica
0.25	<i>Asclepias incarnata</i>	Swamp Milkweed
0.125	<i>Aster nova-angliae</i>	New England Aster
0.063	<i>Aster puniceus</i>	Bristly Aster
0.063	<i>Aster puniceus firmus (lucidulus)</i>	Shining Aster
0.125	<i>Calamagrostis canadensis</i>	Blue Joint Grass
0.063	<i>Caltha palustris</i>	Marsh Marigold
0.125	<i>Carex bebbii</i>	Bebb's Oral Sedge
0.75	<i>Carex hystericina</i>	Porcupine Sedge
0.063	<i>Carex pellita</i>	Wooly Sedge
0.5	<i>Carex stipata</i>	Awl Fruited Sedge
0.031	<i>Chelone glabra</i>	Turtlehead
0.125	<i>Eupatorium maculatum</i>	Spotted Joe Pye Weed
0.125	<i>Eupatorium perfoliatum</i>	Boneset
0.188	<i>Iris virginica shrevel</i>	Blue Flag Iris
0.25	<i>Juncus dudleyi</i>	Dudley's Rush
0.28	<i>Liatris spicata</i>	Spike Blazing Star
0.125	<i>Lobelia siphilitica</i>	Blue Lobelia
0.125	<i>Lycopus americanus</i>	Common Water Horehound
0.063	<i>Onclea sensibilis</i>	Sensitive Fern
0.015	<i>Pedicularis lanceolata</i>	Swamp Betony
0.063	<i>Pycnanthemum virginianum</i>	Mountain Mint
0.188	<i>Rumex orbiculatus</i>	Great Water Dock
0.75	<i>Scirpus acutus (Schoenoplectus a.)</i>	Hard Stem Bulrush
0.015	<i>Scutellaria galericulata</i>	Marsh Skullcap
0.155	<i>Silphium perfoliatum</i>	Cup Plant
0.251	<i>Solidago gigantea</i>	Late Goldenrod
5.889	Total	

NOTE:

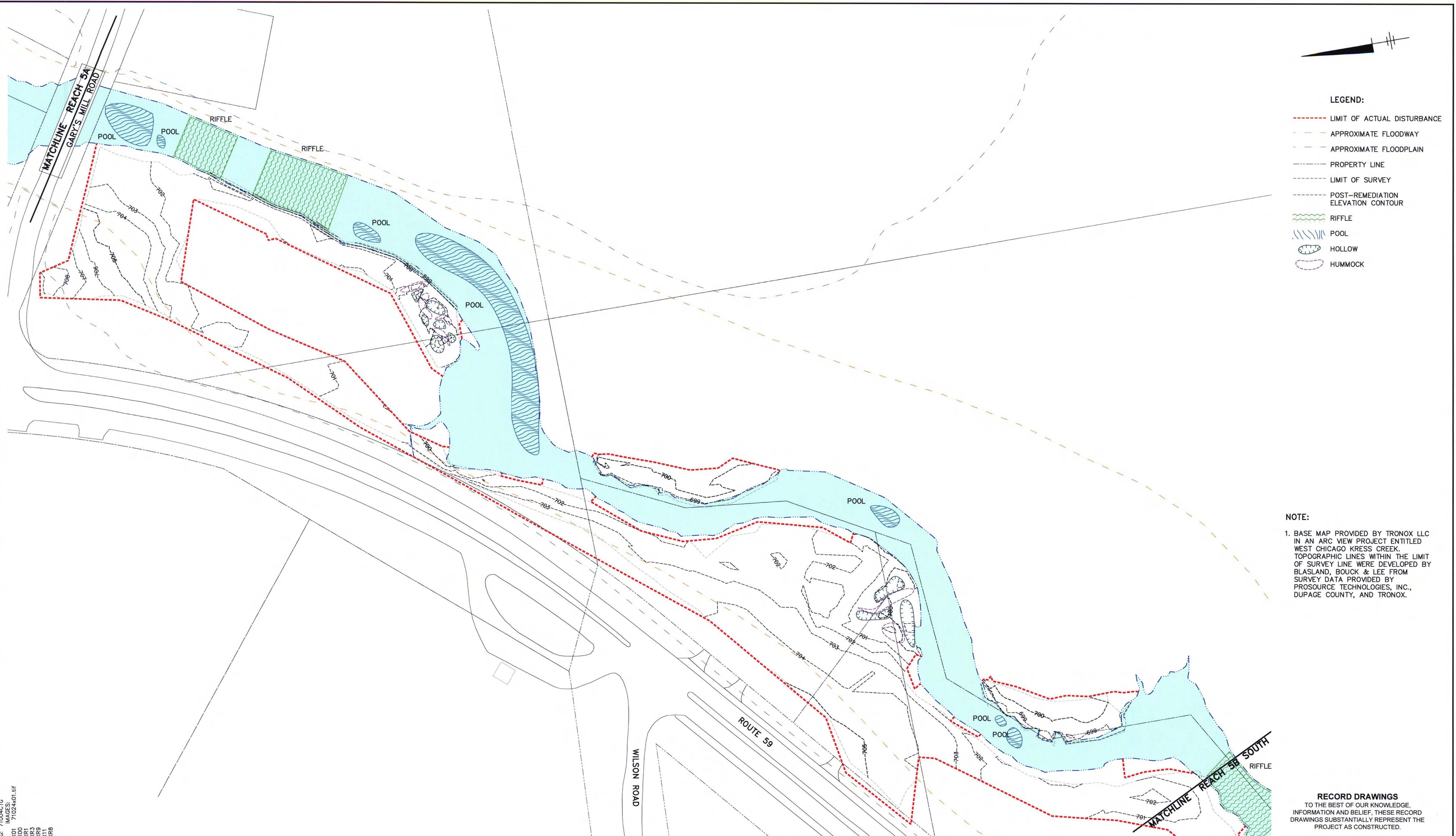
- Seed applied at rate of 10 lbs. per acre plus cover crop.

TABLE 4

Lbs./Acre	Species	Common Name
0.24	<i>Calamagrostis canadensis</i>	Blue Joint Grass
0.84	<i>Carex cristatella</i>	Crested Sedge
0.6	<i>Carex hystericina</i>	Procupine Sedge
0.12	<i>Carex leptocephala</i>	Broad Leaved Wooly Sedge
0.48	<i>Carex scoparia</i>	Broom Sedge
0.48	<i>Carex stipata</i>	Awl-fruited Sedge
0.12	<i>Carex stricta</i>	Strict Sedge
0.48	<i>Carex tribuloides</i>	Awl-fruited Sedge
1.44	<i>Carex vulpinoidea</i>	Fox Sedge
1.44	<i>Cyperus esculentus</i>	Field Nut Sedge
0.12	<i>Cyperus erythrorhizos</i>	Long scaled Nut Sedge
2.4	<i>Eleocharis erythropoda</i>	Barnyard Grass
0.48	<i>Glyceria striata</i>	Fowl Manna Grass
0.6	<i>Spartina pectinata</i>	Cord Grass
0.12	<i>Scirpus acutus</i>	Hard Stem Bulrush
1.2	<i>Scirpus atrovirens</i>	Dark Green Rush

TABLE 6

Sym.	Species	WI	Common Name
Trees			
CCO	<i>Carya cordiformis</i> (FACU)		Bitternut Hickory
COV	<i>Carya ovata</i> (FACU)		Shagbark Hickory
JN	<i>Juglans nigra</i> (FACU)		Black Walnut
OV	<i>Ostrya virginiana</i> (FACU-)		American Hop hornbeam
QI	<i>Quercus imbricaria</i> (FAC-)		Shingle Oak
QM	<i>Quercus macrocarpa</i> (FAC)		Bur Oak



NOTE:

1. BASE MAP PROVIDED BY TRONOX LLC IN AN ARC VIEW PROJECT ENTITLED WEST CHICAGO KRESS CREEK. TOPOGRAPHIC LINES WITHIN THE LIMIT OF SURVEY LINE WERE DEVELOPED BY BLASLAND, BOUCK & LEE FROM SURVEY DATA PROVIDED BY PROSOURCE TECHNOLOGIES, INC., DUPAGE COUNTY, AND TRONOX.

RECORD DRAWINGS
 TO THE BEST OF OUR KNOWLEDGE,
 INFORMATION AND BELIEF, THESE RECORD
 DRAWINGS SUBSTANTIALLY REPRESENT THE
 PROJECT AS CONSTRUCTED.

DATE 7/23/08 BY MOG

(RECORD DRAWING: NEW DRAWING CREATED FROM EXISTING BASE MAPPING AND RECORD SURVEY)

ORIGINAL SCALE APPLIES TO 22"X34" DRAWING		
60'	0	60' 120'
No.	Date	Revisions
12/20/07	RECORD DRAWING	MOG Init

THIS DRAWING WAS PREPARED AT THE SCALE(S) INDICATED.
 INACCURACIES IN THE STATED SCALE(S) MAY BE INTRODUCED
 WHEN DRAWINGS ARE REPRODUCED.
 USE THE GRAPHIC SCALE BAR(S) TO DETERMINE THE
 ACTUAL SCALE(S) OF THIS DRAWING.

▲ 7/23/08 TITLE BLOCK REVISION	MOG	Professional Engineer's Name
▲ 5/29/08 LIMITS OF DISTURBANCE, GRADING, POOLS, HUMMOCKS & HOLLOWES, LEGEND, MODIFICATION OF	MOG	MARK OWEN GRAVELDING
		Professional Engineer's No.
		062059378
		RECORD DRAWING REVISION NUMBER AND TITLE
		BLOCK INFORMATION
▲ 12/20/07 RECORD DRAWING	MOG	State
No.	Date	Date Signed
		ILLINOIS 7/23/08
		Project Mgr. Designed by Drawn by
		MOG ANE NES

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

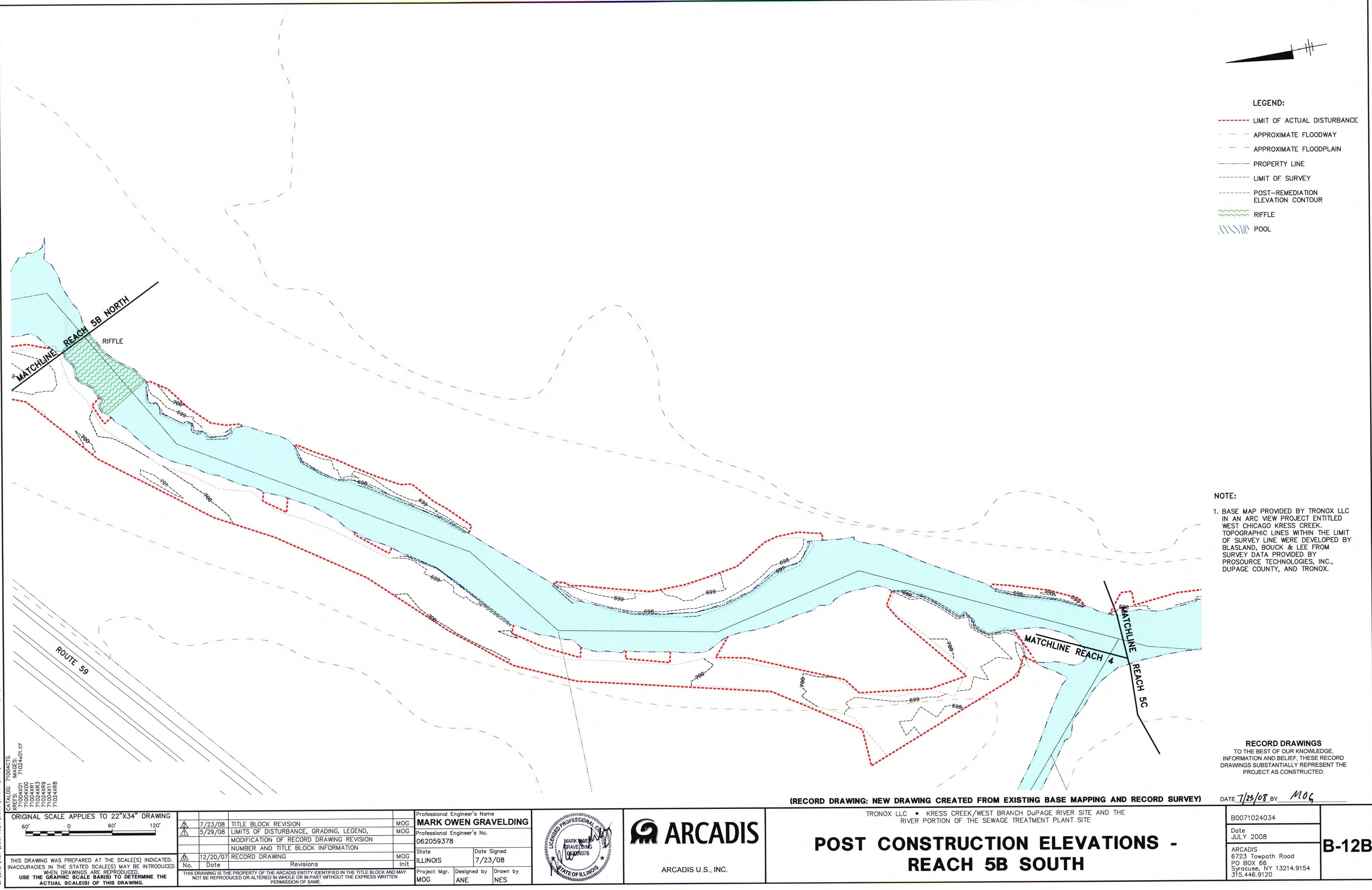


ARCADIS
 ARCADIS U.S., INC.

TRONOX LLC • KRESS CREEK/WEST BRANCH DUPAGE RIVER SITE AND THE RIVER PORTION OF THE SEWAGE TREATMENT PLANT SITE
POST CONSTRUCTION ELEVATIONS - REACH 5B NORTH

B0071024034
 Date JULY 2008
 ARCADIS
 6723 Towpath Road
 PO Box 66
 Syracuse, NY 13214-9154
 315.446.9120

B-12A



ARCADIS

Appendix I

Representative Project Photographs

Photographic Record

Site Name: Remedial Action For Reach 5B

Project Number: B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer:

Mike Savage
ARCADIS

Date:

June 26, 2006

Direction:

Standing on Gary Mills Rd. Bridge, looking south (downstream)

Comments:

Preconstruction photo showing heavily wooded riverbanks.



Photographer:

Mike Savage
ARCADIS

Date:

August 15, 2006

Direction:

Standing on west bank south of bypass pump staging area, looking south (downstream)

Comments:

Looking along west bank after clearing, prior to excavation.



Photographic Record	
Site Name: Remedial Action For Reach 5B	Project Number: B0071020.0000, 00000
Site Location: West Chicago, Illinois	
Photographer: Mike Savage Arcadis	
Date: August 10, 2006	
Direction: Standing at bypass pump staging area, looking northeast	
Comments: MoVax equipment installing sheetpiling for bypass sump.	
Photographer: Mike Savage Arcadis	
Date: August 19, 2006	
Direction: Looking north	
Comments: Looking at bypass pumps with suction piping extending into bypass sump in river.	

Photographic Record

Site Name: Remedial Action For Reach 5B **Project Number:** B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer: Mike Savage Arcadis	
Date: August 21, 2006	
Direction: Looking southeast	
Comments: Standing at South end of Reach 5B on west bank, looking at discharge of bypass pipe to the in-river velocity dissipation system.	
Photographer: Rick Elia Jr. Sevenson Environmental Services, Inc.	
Date: August 22, 2006	
Direction: Looking east	
Comments: Fish shocking activity to capture and relocate fish during startup of bypass pumping operation.	

Photographic Record

Site Name: Remedial Action For Reach 5B **Project Number:** B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer:
Rick Elia Jr.
Sevenson
Environmental Services,
Inc.

Date:
August 23, 2006

Direction:
Looking south from
bypass pump staging
area along 48" diameter
bypass pipe corridor.

Comments:

48" diameter bypass
piping installed in
cleared pipe corridor.



Photographer:
Rick Elia Jr.
Sevenson
Environmental Services,
Inc.

Date:
August 23, 2006

Direction:
Looking west

Comments:

The five bypass pumps
with their separate
suction pipes extending
into bypass sump in
river.



Photographic Record

Site Name: Remedial Action For Reach 5B **Project Number:** B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer:
Rick Elia Jr.
Sevenson
Environmental Services,
Inc.

Date:
August 30, 2006

Direction:
N/A

Comments:

Excavation of targeted material from bank of bypassed section of river.



Photographer:
Mike Savage
Arcadis

Date:
September 9, 2006

Direction:
Looking west

Comments:

Looking at downstream backflow dam with bypass pipe in distance.



Photographic Record	
Site Name: Remedial Action For Reach 5B	Project Number: B0071020.0000, 00000
Site Location: West Chicago, Illinois	
Photographer: Rick Elia Jr. Sevenson Environmental Services, Inc.	
Date: September 9, 2006	
Direction: Looking east	
Comments: Off-road dump truck dumping excavated targeted material (TM) into the TM staging area.	
Photographer: Mike Savage Arcadis	
Date: September 9, 2006	
Direction: N/A	
Comments: Horizontal root wad installation into new crenulated bank.	

Photographic Record

Site Name: Remedial Action For Reach 5B

Project Number: B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer:
Rick Elia Jr.
Sevenson
Environmental Services,
Inc.

Date:
September 19, 2006

Direction:
N/A

Comments:

Hauling and placing
topsoil to final grade in a
completed excavation
area.



Photographer:
Rick Elia Jr.
Sevenson
Environmental Services,
Inc.

Date:
September 21, 2006

Direction:
Looking southeast

Comments:

Completed section of
restored bank with river
rock application.



Photographic Record

Site Name: Remedial Action For Reach 5B **Project Number:** B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer:
Rick Elia Jr.
Sevenson
Environmental Services,
Inc.

Date:
September 28, 2006

Direction:
N/A

Comments:

Installation of crenulated banks, bend way weir
and boulders.



Photographer:
Mike Savage
Arcadis

Date:
May 13, 2008

Direction:
Looking northwest

Comments:

Looking at new
hummock and hollow
area on west bank in
center of Reach 5B.



Photographic Record

Site Name: Remedial Action For Reach 5B Project Number: B0071020.0000, 00000

Site Location: West Chicago, Illinois

Photographer:

Mike Savage
Arcadis

Date:

May 13, 2008

Direction:

Looking east

Comments:

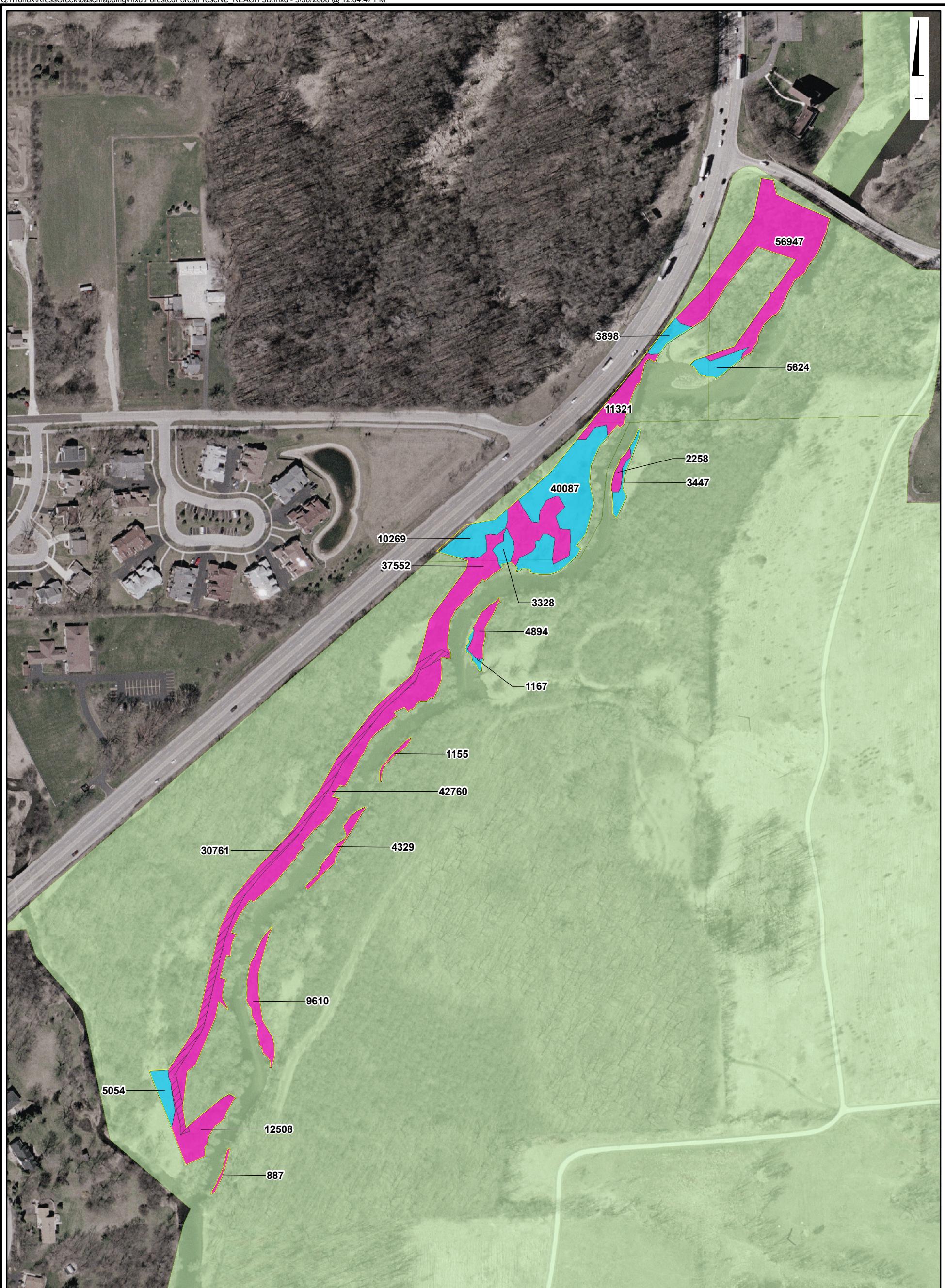
Canadian geese and goslings moved back in to new hummock in center of Reach 5B.



ARCADIS

Appendix J

Forest Preserve Disturbed Acreage –
Reach 5B



LEGEND:

- LIMITS OF DISTURBANCE
- FORESTED FOREST PRESERVE LAND
- NON-FORESTED FOREST PRESERVE LAND
- MITIGATED FORESTED FOREST PRESERVE LAND
- MITIGATED NON-FORESTED FOREST PRESERVE LAND
- FOREST PRESERVE LAND

NOTES:

- AREAS SHOWN IN SQUARE FEET
- AERIAL PHOTOS DOWNLOADED FROM THE ILLINOIS NATURAL RESOURCES GEOSPATIAL DATA CLEARINGHOUSE AT <http://www.isgs.uiuc.edu/nsdihome/>

0 250 500 Feet
GRAPHIC SCALE

TRONOX LLC
KRESS CREEK/WEST BRANCH DuPAGE RIVER SITE
DISTURBED DCFP MEMORANDUM

REACH 5B

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
3